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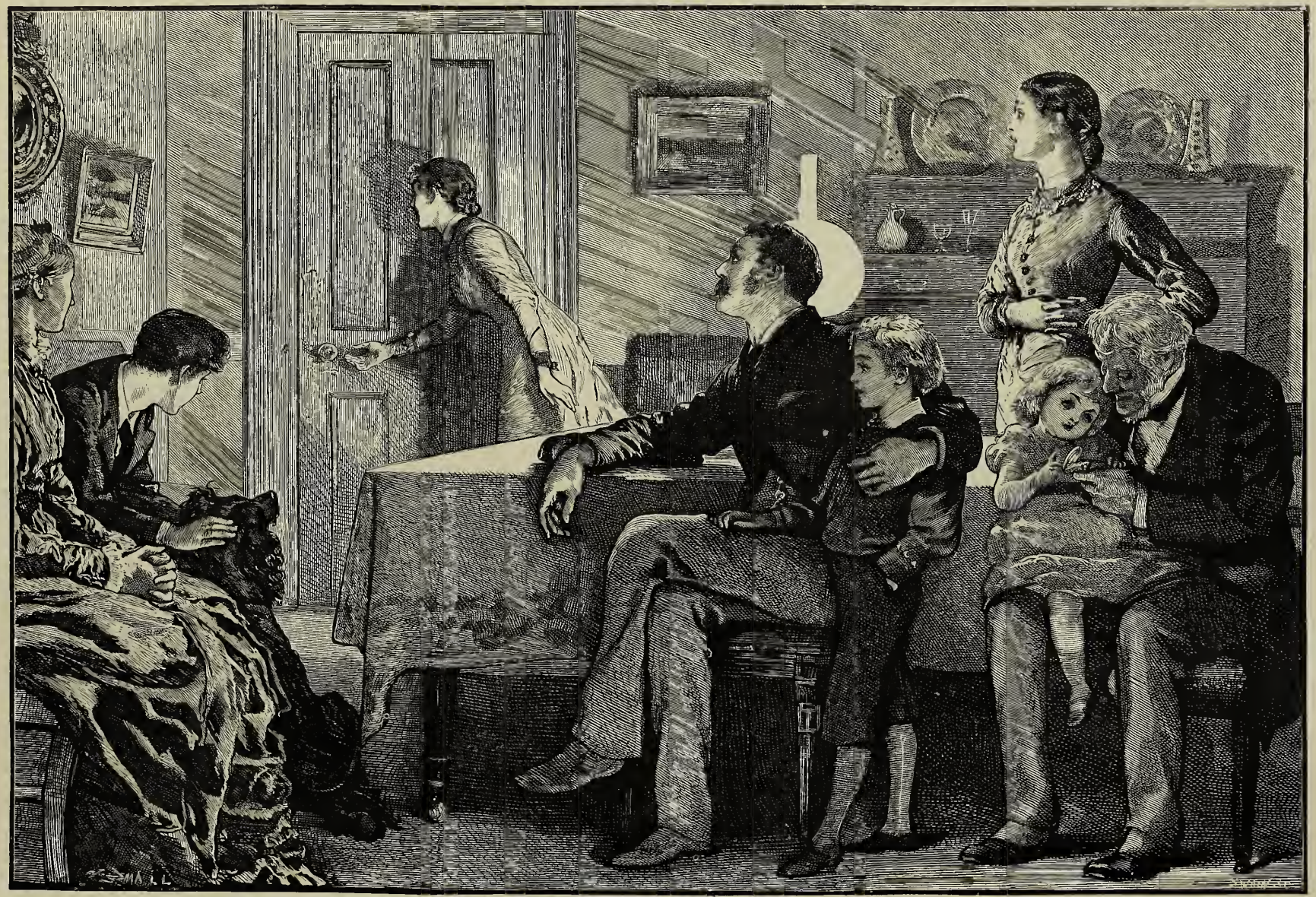
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"A SHARP KNOCK WAS HEARD AT THE HALL DOOR."

"FAITHLESS MARGARET" (p. 56).

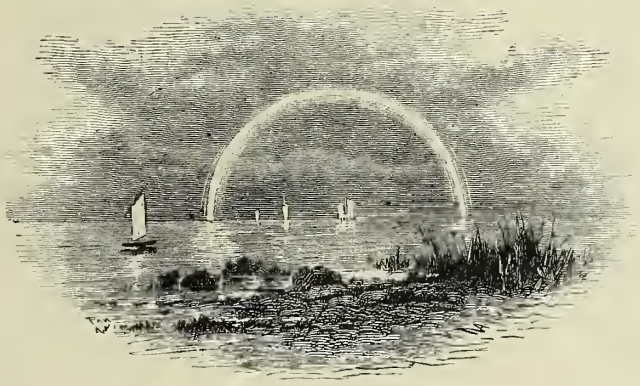
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Vol. 1

CASSELL'S

FAMILY MAGAZINE.

ILLUSTRATED.

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Cassell's Family Magazine.

THE PROBATION OF DOROTHY TRAVERS.

A STORY OF WAITING. By the Author of "In a Minor Key."

CHAPTER THE FIRST.

UNDER THE CEDAR-TREE.



IT is four o'clock in the afternoon of a hot October day. The sun, which has been shining withunwonted constancy throughout the forenoon, pours itself in dying splendour through the narrow casement window of one of the rooms of the Vicarage of Holme Regis, forming an aureole round the head of a young girl, who kneels in front of a large travelling basket.

For almost two hours, with many a pause and many a sigh, she has been assiduously packing it; but now it is quite full. The last book, the last packet has been stowed away, and with a weary sigh Dorothy Travers rises from her knees, shakes her dress, and walks meditatively to the open window, and looks out.

It is a pretty scene that meets her eye, although one which in various forms is repeated in almost every English country vicarage. There is the smooth, velvety lawn, the beds blazing with scarlet geraniums, the neat gravel drive, the paddock where grazes the old horse, now almost past work; but over and above all these, the Vicarage of Holme Regis boasts one, if not two beauties which are not always to be found, even in grounds and parks far more ambitious than Mr. Bruce's modest domain.

Just opposite Dorothy's window stand two splendid old cedar-trees, gnarled and knotted with age, flinging their deep black shadows right and left, and forming a retreat of welcome shade on this burning afternoon. They have been planted on the confines of the lawn, and their boughs droop lazily till they almost touch the clear crystal water of the stream that runs through the garden, and divides it from the Squire's property, which stretches away on the other side.

This stream is the second beauty of the place, and Dorothy's greatest amusement. Ever since the day when she arrived, a tiny three-year-old child, at Holme Regis, until now that she has attained the ripe age of seventeen, it has been her constant friend. Its resources are endless, its treasures manifold. How many hours has she spent, perched on the rustic bridge behind the cedar-trees, patiently dangling a piece of string, to which was attached a crooked pin, in the hope of catching a few sticklebacks! What delight when, by unheard-of exertions, she was enabled to imprison one or two in her little hands, and make them a home of her own devising in an old watering-pot! What tears has she shed over their untimely deaths; and later on, what joy has been hers, when she held her first real fishing-rod, and angled for trout! How many dreams has she woven, how many castles has she built, as, stretched on the grass under the dear old cedars, she has watched the cool, silent depths of the stream, and tried to count the little fish as they darted hither and thither!

She thinks of all this as she stands, lost in thought, at the window, till her eyes are blurred with tears, and the sobs begin to rise in her throat. Yet, after all, one of her castles in the air is coming true. She is going home. Yes, going home! Going to leave Mr. and Mrs. Bruce, the dear Vicarage, the church, the poor people, the cedars, the stream, the Leonards——

At this point her reflections are interrupted, for a boy's—or, I should say, a man's—figure emerges from behind the cedar on the other side of the stream, and a loud voice gives a vigorous shout——

"Hurrah, Dolly! At last you have finished that tiresome packing. What an age you have been! May I come?" and, suiting the action to the word, the young man bounds across the bridge, and stands in another minute under the window.

"Hush, Harry! you must be quiet; Mrs. Bruce is asleep. I did not say you might come." This with a beaming smile of welcome.

"Ah, but I knew you had finished your packing when I saw you at the window."

"Wait a minute, and I will come down to you." And in another moment she steps out on the lawn, and Harry seizes both her hands.

"This is jolly, to have you all to myself."

"But how early you are come in from shooting!"

"I have never been out."

"Never been out! And this is the second of October, and yesterday was Sunday! Why, Harry, what possessed you to stay at home?"

"You, my lady, you. How could I go out shooting when you go away to-morrow? Why, do you know, I have been fishing almost opposite your window ever since eleven o'clock this morning, watching you as a cat would a mouse. I thought you never would have finished all your business."

"You dear, good old Harry! How kind of you! Whilst I was packing I kept listening to the popping of the guns, wondering if you were making a good bag, and thinking I should never have another nice talk with you; and now here you are," and Dolly puts her hand affectionately on his arm.

"Where are Mr. and Mrs. Bruce?" asks Harry.

"I have shut Aunt Mary up in the drawing-room, and insisted on her going to sleep, for she has one of her very bad headaches; and, to my grief, Uncle Tom has been summoned to the furthest corner of the parish, to old Mrs. Smith, who is dying. But, Harry, I have still loads to do, and I must not stay here long."

For all response, Harry draws her away to the seat under the cedar-tree, and makes her sit down. Yet when this is done they seem to have nothing further to say to each other, for they remain quite still, without speaking, gazing at the water that ripples and murmurs at their feet. Harry breaks the silence first.

"What is your home like, Dolly?"

"I cannot tell," she answers sadly. "I know so little about my own people, that this place will always be home to me."

"You will soon forget all about us down here, when you have been some time with your smart relations. You will go to London, and be presented, and marry a duke, and——"

"I shall do no such thing," interrupts Dolly vehemently. "What do you think I am made of, Harry? I shall never, never, never forget this place, or you, or anybody or—— Oh! what shall I do?" And Dolly bursts into a passion of tears, which fills Harry with consternation.

"What a brute I am! Dolly, Dolly dear!" And he tries to take one of her hands from her face. "I did not mean it, indeed I did not. You are not like other girls—vain, heartless, and fashionable"—this from the depths of Harry's twenty years' experience—"you are the dearest, sweetest——"

"Don't, Harry, talk nonsense; that is worse than being unkind. Let us think of something else." And Dolly wipes her eyes, and looks ashamed of herself.

But this is a hopeless suggestion. Insensibly they drift back to to-morrow, and its momentous event, and once more Harry asks, rather timidly this time, and certainly very vaguely—

"And your father, Dolly?"

For answer, Dolly unfastens the slender gold chain that encircles her throat, and hands Harry the locket attached to it, opened.

"There is all I know of papa," she says, pointing to the enclosed photograph; "but it is a nice clever face, is it not?"

Harry gazes at it as though his life depended on it, and finds it difficult to endorse Dolly's opinion. The photograph he holds in his hand was evidently taken some years ago, for it is yellow and faded, and represents a man about forty years of age, with a cold formal face, and thin, narrow lips. He is certainly not plain, some people might even consider him handsome, but Harry's countenance does not look cheerful as he hands back the locket.

"You are not like him, Dolly" is his sole comment.

And Dolly clasps her chain once more round her neck, and says nothing.

Another long pause ensues. Harry plays nervously with his watch-chain, Dolly is thinking of a thousand things. But time is precious, and Harry has much to say, so he once more breaks silence.

"Dolly, do you think you would like to come back here?"

"What do you mean, Harry? Come and stay here? I have settled with Aunt Mary and Uncle Tom to spend August with them every year, if I am allowed to do so"—with a sigh.

"Not exactly that. Do you like the village, the country, the neighbourhood? You know what I mean."

"I love every stick and stone of it. I love all the people about it; and, as I told you, Harry, it will always be home to me."

"Then, darling"—and Harry's tones are low and tender, and his honest, fair face is pink with blushes—"why not think of this as your future home"—and he points vaguely to the park, with its glimpse of a red-brick house in the distance"—and come back some day as my wife?"

Dolly starts as though she had been dreaming; yet she is not displeased, only astonished.

"Yes, dear," pursues Harry, trying to assume a manly, determined voice and manner, "as my wife. You see, Dolly"—and he takes possession of her hand—"I have loved you for years—ever since you came here, I think—but I never knew how dearly, how intensely, till I found you were going away, and then I discovered I could not live without you."

Dolly turns to him a countenance full of sympathy.

"You have always been so good to me," she murmurs, remembering the years of unswerving devotion on Harry's part.

"But, Dolly, you have not answered me," he reiterates. "You do care for me, do you not?" And he looks in her face with a humble pathos, which even a looker-on would have found touching.

"Of course I care for you, Harry, very, very much." And it seems to her that she too has loved him for years, in fact ever since she can remember; but the avowal does not cause her colour to rise, and stirs her pulses but lazily.

"And you will be my wife?"

A moment's thought, a moment's hesitation, and then with the impulsiveness of a child she puts her hand in his, the only young man she has ever known.

"Yes, if—if—Uncle Tom and papa consent."

But Harry heeds not the latter part of the sentence. Dolly, whom he has served as faithfully as any knight-errant his lady-love for the last thirteen years, has consented to be his; that is all that is necessary. He is in the seventh heaven of rapture and joy. Fast and strong come his words, words expressive of such affection and devotion, that Dolly insensibly recognises that a change has come over him even in this quarter of an hour, and that it is a man's, not a boy's, love he

offers her so lavishly. She is carried away by the pent-up stream of his eloquence, and gives herself up to the joy of loving and being loved, with the simple trustful freshness of barely seventeen.

"Does your father know, Harry?" she asks at last, with a vivid blush.

The question brings him back to sober reality, a reality he has been contemplating ever since eleven o'clock this morning.

"No, dear; but he is sure to be delighted when I tell him what a daughter-in-law I intend to bring him. We may have to wait a little while perhaps, as we are both rather young; but next year I shall be of age."

Dolly nods her head. She is thinking of Mr. Leonard, a very terrible old man, who holds his son in abject submission.

"Until then I dare say my father may not allow our marriage; but when I am twenty-one, and you eighteen, we shall be quite old enough to set up housekeeping."

"Oh, quite!"

"Of course we shall live in the country; and meanwhile, Dolly, you will make acquaintance with your own people. I wonder what your father will say to me."

Dolly feels dubious about her father. How can she tell who or what he may like or dislike, when she does not even possess a letter from him—has never heard the sound of his voice or looked in his face? Nevertheless she asserts confidently that he could not fail to like Harry, and that all her brothers and sisters are sure to be very, very fond of him.

So the two sit on together through the lengthening afternoon, and the shadows stretch further and further, the stream murmurs cooingly, and Dolly has forgotten her business. Life assumes its rosiest tints as they converse in low whispering accents, saying all the sweet foolish nothings that have been said, and will be said to the end of time, when Phyllis and Lubin meet together.

No fear of the future troubles their young dream. Harry is heir to a large fortune and estate; Dolly is beautiful—so at least he thinks. Is there any reason why they should not marry, and live happily ever afterwards? Holme Regis is their Arcadia, and beyond it Dolly, at least, has seldom travelled, except in imagination. In the whole course of her life she cannot remember to have heard one harsh word, to have experienced one cold look. At the Vicarage love has reigned supreme, and she cannot believe in any other sway. Her father may be a little strict, a little severe even, but his kindness she never doubts. Whatever uncomfortable sensations Harry may be enduring on the subject of his parent, at any rate he valiantly keeps them to himself; and when Mrs. Bruce, pale and heart-broken at the idea of parting from her darling to-morrow, emerges from the drawing-room, she is almost knocked down by his boisterous greeting. Throwing his two arms round her neck, as he has done ever since he was a little fellow in petticoats, he puts his happy, blushing face close to hers, and whispers in a voice trembling with love and joy—

"Aunt Mary, am not I the luckiest and happiest man in the whole world? Dolly has promised to be my wife."

CHAPTER THE SECOND.

SIR AUGUSTUS TRAVERS.

SIR AUGUSTUS TRAVERS, the father of Dorothy, was a very great man in his own estimation. Born a third son, with very little but his own wits to depend on, he had reached the ripe age of forty-five when, by an unexpected turn of the wheel of fortune, he succeeded his brother in the baronetcy and to a fine entailed estate in Downshire.

He had been early taught by his mother that he must look to his own exertions alone to advance him in the world; and he had not failed to profit by the lesson. With a special talent for languages, he had chosen the diplomatic service for his profession, and when in the Foreign Office had made himself useful in many ways by his real and accurate acquaintance with modern languages. During this period of his career he had entered largely into society—the pleasure-seeking society of London—and had there run against a young lady who, for the first time in his life, kindled something like a sensation of warmth in his heart, and made him, for a few weeks, forget that the object of his existence was to get on in the world. Prudence, however—a quality he rarely lost sight of—came to his aid, and represented to him how unwise it would be for a younger son to marry a girl without money, merely for the sake of affection. So after hovering about Miss Baskerville assiduously throughout the London season, and just as every one had arrived at the conclusion that their engagement would shortly be announced, he departed suddenly to Homburg; and when next heard of in the fashionable world was engaged to be married to Miss Dorothy Mortimer, a woman older than himself, very charming to those who knew her well, very unattractive to the majority of the world, but endowed with plenty of common-sense, and moreover with plenty of money. What Miss Baskerville thought of the matter was never discovered. Possibly, with her beauty and knowledge of society, she had not intended throwing herself away on Augustus Travers; be that as it may, she continued in her former career of dissipation, charming all hearts by her winning manner and pretty face, but, nevertheless, remaining still Louisa Baskerville.

Meanwhile, how Dorothy Mortimer, with her large, warm heart and generous nature, had brought herself to marry Augustus Travers was a mystery to her friends. Certainly, she was most earnestly in love with him, so much so that she failed to recognise the defects in his character, which were such as require study to discover. Through the rose-coloured spectacles of her affection, she saw him only as a most accomplished, handsome gentleman, reserved and thoughtful, calm and sensible in manner, with depths

below the surface, which only required sounding to find out. She had lost both father and mother, and being a woman of past thirty at the time of her engagement, was free to do as she pleased. It delighted her that she was about to marry a poor man, to whom she could bring much, but yet not sufficient, she reflected with pleasure, to allow him to give up his profession.

Just at the time of his marriage, Mr. Travers was offered a secretaryship in one of the South American States, and Dorothy, who had never even crossed the sea, and was anxious to see the world, persuaded him to take it, using a very potent argument—that it was sure to lead to something better. Mr. Travers accepted the post, and a month after his marriage, sailed with his bride for South America.

At first all was *couleur de rose*. They had arrived at the right time of year, the climate was charming, the different mode of living delightful, and everything looked bright. But this only lasted for a short time, for by degrees two facts began to impress themselves with troublesome persistency on Dorothy's mind. The first was that the climate was by no means all that she had fancied it, and that it disagreed with her entirely: The second, and by far the worse of the two, was that she gradually learnt to know her husband. The process was not a pleasant one, and when once commenced was rapid. In time it came to this, that on all matters of any importance they were utterly at issue, and whenever they disagreed, which, alas! was frequently, Dorothy, with her warm, quick temper, was no match for Mr. Travers's cold sneers and formal deliberation, and inevitably got worsted.

Still they went on, without any idea that they were ill-assorted, and would have been much astonished if they had heard casually that any of their acquaintances did not consider their marriage a happy one.

How it might eventually have turned out it is impossible to say, for they had been married barely a year when poor Dorothy, her constitution undermined by the climate, died a fortnight after giving birth to a daughter.

Mr. Travers bore his loss as he bore everything else, without displaying much feeling; yet in one respect he felt it acutely, and none the less that it concerned money matters, which always lay very near his heart.

At the time of his marriage with Dorothy Mortimer, in the first blush of her affection she was anxious to lavish everything she possessed unreservedly on her husband, and would willingly have come to him without settlements. But there were unfortunately, or perhaps fortunately, those necessary evils, trustees, to be consulted, and Dorothy's trustees were eminently unromantic characters.

The settlements, when finally drawn up, were very foreign in their arrangements to both Mr. Travers and Dorothy's wishes, and although in accordance with her father's will, the latter did not hesitate to express her disapproval of them. Augustus said but little on the subject, but none the less resented it, and with a curious perversity, felt a grudge against his wife for that which she had been powerless to prevent.

By the provisions of the settlements, in the event of Dorothy's death her money was to be equally divided among her children, if she left any, the sons to come into their portions when they were twenty-five, the daughters when they married.

Left now with only one daughter, who was to say how early she might marry, carrying with her the whole of her mother's fortune, it was not an agreeable prospect for Mr. Travers; but to do him justice, the baby was just now his greatest care, and his one anxiety was to transport her to England, and to be relieved of the burden of her presence.

The opportunity soon occurred. Whilst still in deep mourning for his wife, he heard of the sudden death of his second brother from an accident in the hunting-field. He seized this occasion to obtain leave, and, accompanied by the child and her nurse, embarked for England.

He was not on very happy terms with his elder brother, the owner of the family estate, so on arriving he made London his head-quarters, had various interviews with his solicitors over the small legacy his brother had left him, and sought about for a home in which to leave his hapless and unloved little daughter.

His relatives one and all refused the charge of the little girl, not caring, as they said, to have any business relations with Augustus, although they had all liked the little they had seen of his wife. Consequently, Mr. Travers, whose leave of absence was limited, was much troubled as to what to do with his baby daughter. He began to study the advertisements in the *Times* in which happy homes and parental care are offered to such children whose parents are out of England or dead. He grew weary of answering them only to find that they were by no means all they promised, and in a desponding frame of mind was sauntering down Piccadilly one day, hardly looking where he was going, when he was recalled to the present by a collision with a tall, broad-shouldered man, evidently a clergyman from his dress. The two men begged each other's pardon and, looking into each other's face, broke simultaneously into a smile of recognition, as "Bruce!" "Travers!" escaped their lips.

"The idea of seeing you, Travers!" said Tom Bruce, as he gave Augustus's thin, flabby hand a hearty shake. "Why, I fancied you were broiling in South America." Then, perceiving the black hatband he wore, he forbore to ask any further questions, fearing he might tread on dangerous ground.

But Tom Bruce was the man of all others that Augustus Travers would have chosen to meet just now. They had been friends, although not intimate ones, at Oxford, where Tom had been as popular as Augustus the reverse, from his never-failing good humour, his readiness to help others, and his perfect honesty and reliability. Strong and muscular to an uncommon degree, he had been more distinguished as an athlete than as a scholar, and had therefore not a little

surprised his friends by passing his examinations very creditably, if not brilliantly. That was now many years ago, and Mr. Travers had forgotten his very existence till it was recalled to his memory by this unexpected meeting, and with it the recollection of the character Tom Bruce bore at Oxford, of being willingly accepted his friend's companionship, and before they had reached the Strand, whither he was bound, had learnt all that Augustus had been doing since they had parted, ten years before, at Oxford. The dilemma of the child was not long in forthcoming, and Mr. Bruce was full of sympathy, but it seemed



"AT HIS FEET, HER HEAD ON HIS KNEES, LAY CURLED FAST ASLEEP LITTLE DOLLY" (*p.* 9).

willing to do a kindness for any one, no matter who it was.

Here, then, was the man to assist him in his search for a home for his (by this time) almost detested child. To Mr. Bruce's greeting he therefore responded with unusual cordiality, and as he had nothing particular to do, he offered to walk with him, wherever he might be going, and they would have plenty of time for a chat. Mr. Bruce, who with his long legs was intending to stride half over London, misdirected, for it was apparently more for little Dorothy than for her father. He could not but think that the Travers family must be remarkably ill-natured people if not one amongst them could be found to offer a home to Augustus's poor child; and as he ruminated on the subject an idea struck him, which he was cautious enough not to mention till he felt sure of his ground.

Augustus, having finished the slow, formal account of his own sayings, doings, and woes, bethought

himself of asking Mr. Bruce how he in his turn had been spending these years which had intervened since their college life, in a kind of vague hope that his friend's narrative might suggest to him some way out of his own difficulty.

"Oh, my story is very short, very commonplace, and therefore highly uninteresting," responded Mr. Bruce cheerily. "After I left Oxford, where, as you know, I failed signally to distinguish myself, I took orders. My first curacy was with a Mr. Rowley, the Rector of Flitton, in Devonshire, and as a natural consequence, before I had been there two years, I was engaged to his daughter. The following year, my father having died meanwhile, we married, on a very small living I had been given in Cornwall, and there we are now, not over-blessed with riches, and very hard-worked, but, nevertheless, happy enough. We have no children, and not much money; but our house is cheerful and well-built, our view is beautiful, our soil is good, our parish interesting, and our health fair. There you have my history, and an uncommonly foolish one you no doubt think it."

This was so very true that Augustus could hardly deny the charge, more especially as he was thinking of something else. Would not the Bruces be the very people to take care of his little daughter? They were poor, therefore it might be an object to them to increase their means; they were thorough gentlepeople—he knew all about the Rowleys—therefore to them might be confided the care of forming Miss Travers's mind and manners; they lived in a healthy situation, to which he might send the baby without any qualms as to her physical well-being, and he knew enough of Tom Bruce to be certain that whatever he undertook to do would be well done. But how to broach such a delicate subject?

It was Mr. Bruce himself who broke the ice, but in so cautious a form that Augustus, who for the first time in his life was inclined to be in a hurry, felt quite angry with his friend for his reserve.

"You say," he began, "that you have to return shortly to America, and are therefore anxious to find a home immediately for your little girl?"

"Exactly so. Do you think you know of one?"

"It is just possible I may, although it might not perhaps altogether suit your views. I return to Tregarva to-morrow. I will then write and let you know all particulars, provided the parties themselves consent to undertake the charge of the child. To-day is Tuesday. You shall hear from me by Friday. But before I do anything further in the matter, I must see the child."

"See the baby!" exclaimed Augustus, standing still in the middle of the pavement, and facing his friend, from sheer amazement. "See the baby! Do you know how old she is? I am not sure that she is not still in long clothes. What can you want to see her for? She is exactly like every other child of that uninteresting age. She is not deformed, nor has she water on the brain; she has her proper complement of limbs, and if you did see her you could never describe her. The idea of looking at a baby!"

Mr. Bruce smiled, a broad, good-humoured, obstinate smile, not a little amused by Augustus's unusual vivacity, at the same time betraying his thoughts.

"Nevertheless, I tell you, I must see her. What would Mary say if I had never even seen the child?"

Mr. Travers was too wise to notice this involuntary slip of the tongue, which told him all he wanted to know.

"Come, then," he answered, "if you must, you must; but I warn you it will be waste of time. You shall accompany me to Half-moon Street, when you have done your business, and gaze your fill at the baby; but if you are able to describe her when you return to Cornwall, you will be the first man who has ever accomplished such a feat."

CHAPTER THE THIRD.

DOROTHY.

SHE was a little brown-eyed, fair-haired child, much, as Mr. Travers had said, like other babies; but Tom Bruce discovered an occult beauty in the little round face, and forthwith gave himself up unreservedly to do homage at her shrine. Laying aside all disguise, he told Mr. Travers that if the matter rested only with him he would at once, and willingly, have transported the child to Cornwall with him, but he must first consult his wife. "Not," he added, "that there will be much fear as to what her answer will be."

Mr. Travers was immensely relieved. The business part of the transaction was discussed and arranged, and, mutually delighted with their bargain, the two men parted, not to meet for many a long year. Within a week, little Dorothy found herself transplanted to Cornwall, there to meet with a warm and loving welcome.

Mr. Travers saw her depart with heartfelt rejoicing. A delightful sense of freedom took possession of him. The episode of his marriage with Dorothy Mortimer seemed to fade more and more into the dim distance, leaving only a tangible and very pleasant reality in the shape of her money.

And now once more his thoughts turned themselves to Miss Baskerville, the woman he had really loved. He had already ascertained that she was still unmarried. Why not employ his few remaining days' leave in renewing his acquaintance with her?

Accordingly, one dull afternoon in February, he presented himself at the Baskervilles' house in Bryanston Square, hoping he might find them in London. He was not disappointed; the house was evidently occupied. But on the door being opened to him he was sternly told that the family could see no one, on account of the recent death of Mr. Baskerville.

This was really a blow to him. His days in London were numbered, and he felt he could not leave now without once more seeing the girl who had formerly been so attractive to him. Annoyed, and puzzled as to what to do next, he turned away from the doorstep to encounter Miss Baskerville herself, dressed in deep mourning, and looking even lovelier than he remembered to have seen her.

She was apparently as pleased to meet him as he was to see her, for in spite of her recent bereavement she did not attempt to avoid him, but at once gave him her hand, with a sweet pathetic smile which went straight to his usually invulnerable heart. Encouraged by it, he walked to the end of the square with her, and must needs see her safely to her own door again. In this way they made the tour of Bryanston Square once, twice, and even three times, so engrossed were they with each other's conversation; two hearts beating in perfect unison, two heads perfectly agreed as to the aim and object of their existence. No need for Augustus to tell his story to Louisa Baskerville—she was well acquainted with it. She knew to a farthing what fortune had been left him by Dorothy, knew also that he stood one degree nearer the baronetcy than formerly, and was also aware that he had a little daughter.

Her own little history was very sad, she said. Her poor father was dead, and she and her mother and brothers and sisters were shortly leaving Bryanston Square, for a smaller and less expensive house. How lovely, how pathetic she looked, he thought, as, with tears in her downcast eyes, she related this to Augustus, and from that moment his mind was made up. Wringing her hand with a fervour which surprised even himself, he bade her adieu, and hoped he might see her again before leaving London.

And he did see her again the following day, and on each succeeding afternoon; and every hour her ascendency over him grew stronger and stronger until, when they parted, it was with the understanding that he should return the following winter and make her his wife.

Many years had passed away since then. Mr. Travers and his beautiful wife had quitted the noxious climate of South America when another and more advantageous post had been offered them, slowly but gradually climbing the diplomatic ladder, until once more they found themselves on European soil, and transplanted to Lisbon. From Lisbon they moved to Madrid, and from thence by a rapid transition from the sunny South to the dreary North, to the ungenial climate of Berlin. Here they spent two years, until recalled to England by the death of Mr. Travers' eldest brother, Sir John, upon which Augustus, washing his hands of diplomacy, resolved to turn country gentleman, and to live at Wrangham, the family estate, now that he had come into the title.

Wherever they went in the course of their wanderings the same opinion followed them. Mr. Travers was the quintessence of British reserve and stiffness, Mrs. Travers just the reverse. He was unpopular, and she was adored. She understood the art, so necessary in the position in which she was placed, of saying the right thing to every one, and at the same time, without their being in the least aware of it, of making them do precisely what she pleased. In her own home she was paramount, and husband and children were equally under her sway. Of the latter she had her fair share, six in all, and most of them were hardly aware that they possessed a sister in England. When Mr. Travers was asked the number of his olive-branches he invariably responded six, so completely had little Dorothy faded out of his memory. In the flying visits he and his wife paid to England they found no time to spare for the eldest child, and had it not been for his punctually paid remittances to Mr. Bruce, for a few letters and photographs sent from time to time from the Vicarage, Dorothy would have been consigned to the same oblivion as her dead mother. Mrs. Travers never forgot her, but industriously though passively assisted in effacing her memory from her husband's mind, by abstaining from mentioning her name, and by carefully refraining from speaking of her to her children.

So it came to pass that Dorothy Travers grew up for the first two years of her life in a remote Cornish village, and afterwards in an almost equally secluded one in Herefordshire, perfectly unacquainted with her father, or brothers and sisters. To the Bruces she was as their own child. They could hardly have loved her more had she been so, and her affection for them was no less strong.

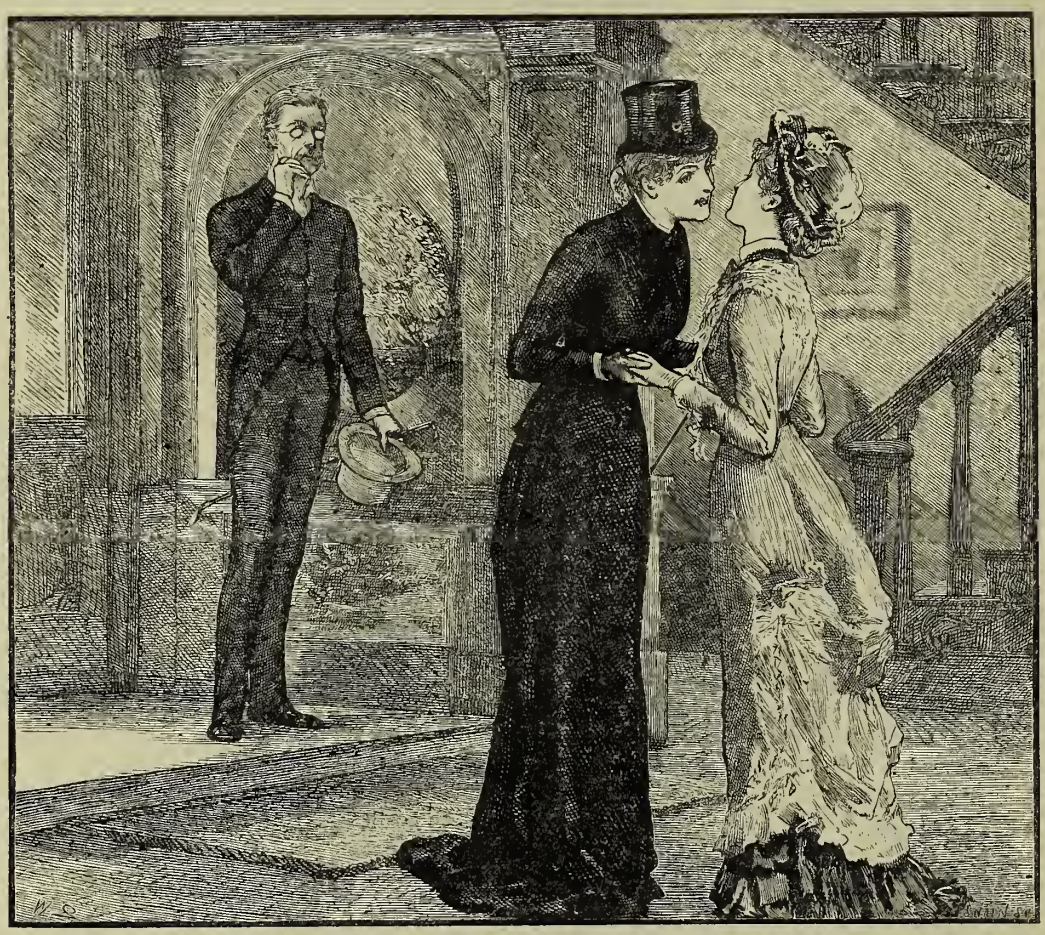
But Mr. Bruce was her especial friend and companion. From the first moment of her arrival at Tregarva, he had surrendered himself her willing slave, and as soon as she could talk she learnt to issue orders to him, which he never failed to obey. As she grew older she was his constant companion wherever he went. From him she picked up all kinds of scraps of knowledge that do not usually come within the range of a young lady's education. Hand in hand with him, or when tired carried in his strong arms, she wandered over the wide Herefordshire parish, storing her child-mind with a motley jumble of facts respecting animals, fossils, insects, and plants, the properties of water and light, the uses of herbs, and the hundred and one wonders of the country, until every blade of grass was an interest to her, and the whole house was littered with hers and Uncle Tom's —as she called him—collections.

She had no governess, for Mr. Travers' remittances, though punctual, were not generous, and whilst his present wife's children were enjoying the advantages of masters and mistresses for the various accomplishments considered requisite for their education, Dorothy's child was picking up what knowledge she could in rather a desultory fashion. Mrs. Bruce taught her all she knew, and that was considerable, and Mr. Bruce lent himself to the work of education with a love and zeal that no paid master could have given, and with results to which no paid master could have attained.

So although Dorothy could not speak Spanish or German, she could have shamed her schoolboy brothers in Latin and arithmetic, and have competed evenly with her sisters in French. As for accomplishments, she had no lack of talent for them. Pencil and paper in hand, she was perfectly happy for hours together, and every child in the school who had the faintest pretension to good looks had had her portrait taken, sadly out of drawing, but still always recog-

nisable, by Miss Dolly. She played the small organ in church on Sunday, strummed on the piano, and had—so said Uncle Tom—the voice of an angel.

But this was, perhaps, the least part of all Mr. and Mrs. Bruce had taught her. They had given her what it is to be feared she would never have learnt at home, an education in far deeper matters, enforced by that most potent argument, example, which was well calculated to teach her how to face the new world she was one day destined to enter.



"SHE KISSES HER FIRST ON ONE CHEEK, THEN ON THE OTHER" (*p.* 12).

Holme Regis, where the best part of her life had been passed, was in a lovely but secluded part of Herefordshire, where the roads were bad, and the hills a great barrier to intercourse with the neighbourhood. Not being burthened with this world's goods, the Bruces, with their one old horse, found it somewhat difficult to get about, and Dorothy would have grown up with no companions of her own age and standing, had it not been for the inhabitants of the great house, the park of which, as we have already mentioned, joined the Vicarage.

The Manor House at Holme Regis was one of the lions of that part of Herefordshire. Built originally in the time of Henry VIII., it had been altered and added to by different generations of Ingrams till it formed one of the most rambling, picturesque old houses it is possible to conceive. The façade, its crowning beauty, with its two projecting wings, all that was now left of what had once been a quadrangle, had been untouched since it was first built by a Geoffrey Ingram in 1520, and was as interesting a piece of architecture as one can often see in England. The park was famous for its magnificent old trees, the gardens for their variety. The Ingrams had all possessed a taste for horticulture, which led each succeeding owner to seek to outshine his predecessor by some new method of laying out the grounds. Thus it happened that the visitor to Holme Regis would wander from the Dutch to the Italian garden, from the Italian to the real old-fashioned English pleasure-ground, his mind confused as to which he preferred, until—if it were the spring—the glowing masses of rhododendrons and azaleas in the American gardens would invariably carry off the palm.

But the Ingrams had gone the way of so many old families. Extravagance, debt, large families, careless fathers, wild sons had done their usual work, and Holme Regis no longer knew the name of Ingram. Some twenty years ago it had passed into the hands of a

certain Mr. Leonard, a self-made man, who although at the time between forty and fifty, had only recently been married. He and his wife brought with them to their new home their baby boy Harry, then quite an infant; and as years went on another child, a girl, whom they named Margaret, was born to them. Mr. Leonard had known Mr. Bruce formerly, and liked him for his honest independence of character; so, when the small living pertaining to his newly-acquired property fell vacant, he offered it to him, and was pleased to find it accepted.

Naturally it came about that small Dolly and the little Leonards were much together, with their nurses as tiny children, alone when older. But Dolly and Harry were always the sworn allies from the day they first met. Harry recognised a kindred soul in Dolly, one who would encounter any number of brambles in a search for blackberries, or a whole herd of cattle when looking for mushrooms; who would jump a stream with the agility of a kitten, and mount his pony as fearlessly as himself. Wherever he led she would follow. But it was very different with his sister Margaret. She, like her father, apparently lived but to read. From the moment she could put words of one syllable together, she was invariably to be found poring over a book, her black hair falling like a mane over her face, her whole being absorbed in what she was perusing. When not reading she lived in a dreamland of her own, her large dark eyes wearing an abstracted far-away look, unless she happened to be interested in anything that was being said or was going on around her. Then they would light up and gleam like stars in the sallow face, and she was at once transformed from a plain to a handsome child by the bright intelligence that flooded every feature. "A bundle of bones and nerves," Uncle Tom called her, and he was about right, for the child was unnaturally thin, and, in proportion as her brain developed, her body seemed rather to dwindle than to grow. What wonder that she was sickly, fretful, and irritable, and had neither the strength nor inclination to join in Dolly's or Harry's more boisterous pursuits? Dolly loved the delicate sensitive child in a protecting motherly kind of way, but she regarded Harry as a brother, and there was no end to the mischief those two were guilty of when together. Dolly ordered Harry about in a pretty, imperious manner, and he only loved her the better for it; but when she put up her little face to him and said, "Harry, I am so tired," he would have carried her every step of the way they had to go together, had he possessed the strength. Once the two were found about a mile from home, sitting in the wood, imbedded in gold and green fern and moss, under a wide-spreading beech-tree, Harry looking preternaturally solemn and still, whilst at his feet, her head on his knees, lay curled, fast asleep, little Dolly. Her golden hair fell in a tangle over her face, her little hands were stained with blackberries, her basket full of wild flowers clutched tightly in one of them, whilst the other lay locked in Harry's brown fist. It was the prettiest picture of the babes in the wood, and Uncle Tom, who found the two little culprits, had not the heart to scold them, particularly when Harry said simply, "She was so tired." So little sleeping Dolly was picked up and carried home in Mr. Bruce's arms, and nothing more was said about it.

No one thought anything of Dolly's and Harry's devotion to each other; it was only natural, they said; and when the time came for Harry to go to school, and Dolly cried her eyes out over it, that again was only natural.

Mr. Leonard was a very strange man. Reserved and reticent to extreme taciturnity, he shunned all society, burying himself for days together in his library with his books and his papers, and avoiding all intercourse with the outer world. Whatever his origin might have been, and every one knew it was not illustrious, no one who saw him or heard him speak could have mistaken him for anything but a gentleman. There were the usual stories afloat of his having started in life with the proverbial half-crown in his pocket, and of his having worked himself up to the top rung of the ladder by his own talents, and he himself was the last man to deny them. If ever he did speak of himself, he gave every one to understand that he was a self-made man, and that he gloried in it; and, unlike some of his class, when he had made his fortune and enrolled himself in the upper ranks of society, he did not change his political views.

For his wife he had little sympathy, or he would hardly have condemned her to the life of luxurious seclusion she led at Holme Regis. She was a pretty, gentle nonentity, the daughter of an officer of good family, who spent most of her time in devising her own and Margaret's dresses. As a dressmaker she would have been a successful and a happy woman; as Mrs. Leonard she was neither. She loved her poor little delicate daughter because she was quiet and docile; but for Harry, with his noisy ways, his muddy boots, his pockets full of all manner of unsightly things, she had no sympathy. She was thankful to send him out of the house to seek Dolly's or his dear Mr. Bruce's society, and would return to the set of a skirt, or the trimming of a jacket, with renewed ardour when she no longer heard his whistle about the house. There was one thing she did wish: it was that Margaret were like little Dolly Travers. It would have been a pleasure to dress her if she had possessed Dolly's lissom figure surmounted by that winsome face, with the rosy child's mouth, and liquid brown eyes, and the clear fine skin, that no amount of sun could spoil, save that it brought out one or two freckles on the high-bred little nose. Margaret, in her best and smartest dresses, always looked even more sickly than usual by the side of Dolly Travers, in her sunburnt old hat and her plainly-made cotton frocks, but with health and happiness shining out of her bright eyes.

To Mr. Leonard all this was of no account. He took little interest in his children, and still less in his household. When he did express his wishes on any subject, it was in such a manner that he could not be disobeyed, and when his wrath was roused it was very terrible. Wife, children, servants, were all afraid of him, and Harry would rather have endured any

amount of condign punishment than encounter the stinging contempt with which his peccadilloes, when brought under his father's notice, were treated.

But when Harry was ten years old, and had already been at school for a year and a half, there came a change over the old house. Gentle, mindless Mrs. Leonard, who had long been the proverbial creaking door whose illness, whether real or imaginary, by degrees every one comes to disregard, died almost suddenly one bright summer day, passing away as quietly and gently as she had lived. It was impossible that a woman of so little character should cause passionate regret or grief, but as far as he could sorrow for any one, Mr. Leonard mourned for his wife in his own eccentric fashion, burying himself even more profoundly than heretofore in his books, and shunning society, if possible, more than ever. He could not, he said, be troubled with children, so poor little Margaret was sent to live with an aunt, the only relation Mr. Leonard was ever heard to mention, whilst Harry was permitted, as an immense privilege, to spend his holidays at home, on condition he gave no trouble to his father.

Deprived of mother and sister, Harry very naturally made the Vicarage his home, and in holiday-time was literally with Mr. Bruce or Dolly from sunrise to sunset. Every day the two children grew fonder of each other. But no one heeded it, or if they did, they thought it would right itself when Dolly went home, and Harry took to some profession. And so it did right itself, though in a different way from what they imagined. Under the old cedar-tree, to the accompaniment of the stream, the two had engaged to become husband and wife.

CHAPTER THE FOURTH.

HOME.

DOLLY is in the train, steaming away to Wrangham. She has the carriage all to herself, and is at liberty to cry to her heart's content, to read, to go to sleep, or do anything she pleases. It is in the former of these amusements that she is indulging. The long-restrained tears rain down on book and jacket, as she mentally rehearses all the sad farewells of the last two days.

Strangely enough, it is not over her adieu to Harry that she sobs so heartrendingly. It is over her parting with Uncle Tom—Uncle Tom, who had brought her to the station, and put her into the carriage, and lingered to the last moment, and then torn himself away, with a look in his face, the remembrance of which makes her sobs come thick and fast—Uncle Tom, whom, on her last day at the Vicarage, she has so upset by telling him of her engagement to Harry, in the hope of comforting him by this prospect of her return to Holme Regis at some future period.

But the piece of news has had an exactly contrary effect on Mr. Bruce. If a thunderbolt had fallen at his feet he could not have been more astonished and, to Dolly's amazement, more annoyed. For both he and his wife are exceedingly vexed at the unexpected turn affairs have taken. They have both been blind, they know, but Mr. Bruce calls it by a harsher name, accuses himself of carelessness and neglect, and wonders what Sir Augustus will say to the way he has looked after his daughter. Aunt Mary takes a more hopeful view of the case. Harry, she says, has no fault but his youth, and as he is heir to a large fortune and fine estate, Sir Augustus will probably be delighted at the engagement. But Mr. Bruce cannot forgive himself. He passes a sleepless night, rising with the first streak of dawn to ponder over this result of his culpable carelessness, as he persists in calling it. Dolly starts at half-past nine, but more than two hours before that he is pacing the yew avenue at the Manor with Harry, planning and arranging as to what is best to be done. After much cogitation it is finally settled that Harry shall tell his father at once what has passed, and afterwards make known by letter the result of the interview to Dolly, "which will give the poor child time to get accustomed to her own father before she has to reveal to him that she is engaged to be married," says Uncle Tom, his heart full of compassion for his darling. At the same time as Harry writes to Dolly, Mr. Bruce will communicate with Sir Augustus, in order to explain his own share in the matter, and to facilitate for Dolly the revelation she has to make to him. With morning light Harry feels even less cheerful as to how Mr. Leonard will approve the step he has taken than he did yesterday, and Mr. Bruce is equally doubtful of Sir Augustus' pleasure at the engagement in spite of Harry's brilliant prospects, so it is with rather heavy hearts that the two men take leave of each other; but the impending parting with Dolly is to both of them such a culminating grief, that at present it outweighs all else.

Dolly thinks of all this as she sits in the hot railway-carriage, with a book open upside-down in front of her, all blotched and spotted with tears. She thinks of it till her vivid imagination has presented her father to her under fifty different aspects, as he listens to her communication, one moment grave and severe, the next tender and smiling. She has a long weary journey before her, and time enough to cry, and read, and build castles in the air, and even go to sleep. She did not sleep much last night, and crying has made her eyes heavy, so she dozes off and dreams she is out boating with Harry, and the boat upsets. It is only the train stopping. She looks out of window; the porters are shouting "Wreford," and, spite of its extraordinary mispronunciation, she recognises the word, and knows she is nearing home. How she longs for it and yet dreads it, and wishes, tired as she is, that the train would go on for hours! However, arrive she must, and so she makes the best of it, smooths her hair, readjusts her veil, hopes her eyes are not red, and falls to imagining her reception. She has had so much love shown her ever since she came under Uncle Tom's sheltering care, that the non-existence of that element in her future life does not come within the limits of her imagination.

She therefore pictures to herself, as meeting her at the station, a vehicle of some kind, possibly a waggonette, driven by her father, and two or three brothers and sisters inside, all eager to know and greet her, as she is eager to know and love them. Already—in imagination—she has mounted by her father's side, has made acquaintance with the brothers and sisters, and is being driven home behind a pair of good horses, when the train once more stops, and the castle-building is quickly changed to reality. She puts her head out of window, and scans the little country station eagerly. There are two or three second and third-class passengers walking up and down waiting for the train, and in the distance she descries a footman in livery. However, this is her station, and here she must alight. As she emerges from the carriage, the footman approaches and touches his hat.

"The brougham is waiting for you, miss," he says. And Dolly to make sure asks, "From Wrangham?"

The answer is in the affirmative, and she hurries away to the brougham, feeling certain that some one will be seated inside to give her a welcome. But when she reaches it, it is empty. She jumps in, determined not to give way to the sensation of chilliness that is creeping over her, and in a few minutes is driving in solitary state home. She has four or five miles before her, and with every yard that brings her nearer the gates of Wrangham, she wishes it were fourteen or fifteen—anything to defer that dreadful ordeal of arriving.

The country is flat and ugly, very different to the rich undulating landscape she has just left. Holme Regis has made her fastidious, and when, after driving through two lodges, a sudden turn brings her in view of the house, it strikes her as the very ugliest building she has ever seen. A great square pile of weather-stained grey stone, with only sufficient creepers about it to throw out its natural baldness, it certainly suffers by comparison with Holme Regis; and as she drives up to the door, at which stand no welcoming faces, what would she have given to have turned back to the station, and taken the first train home to the Vicarage again!

But now the door is thrown open, and instead of father and sisters, a butler and two footmen receive Dolly with—to her—awful ceremony.

"What name?" asks the butler deferentially. So even the servants only know that a young lady is arriving. With her little head thrown back, and her shyness for one moment swallowed up in indignation, Dolly answers—

"Miss Travers," and is conducted across a large square hall, through an ante-room into the library. It is apparently empty.

"Her ladyship is out riding, but will be home soon," says the butler, and retires. Dolly feels that it is dangerous to leave her alone; she will certainly take flight, and return to Uncle Tom, unless some one presents him or herself soon.

"Who is there?" she hears a small shrill voice cry out, and starts guiltily, for she is making a tour of the room, and inspecting its many beautiful contents—"Can't you answer?" and she becomes aware of a little white face peering impatiently round a recess, and a pair of bright blue eyes fixed upon her.

Her heart gives a bound. Here at last is one of her brothers, at any rate. She advances quickly to the couch where he lies—a little fair-haired, delicate-looking child, of about seven years old, who would have been strikingly handsome had he looked less worn and old; but there is something painful in his prematurely wise little face and his bright restless eyes, as he scans her from head to foot in one quick, inquiring glance.

"Who are you?" he asks once more, leaning back on his couch.

"Don't you know who I am, darling?" asks Dolly, almost with a sob, stooping down and kissing the little white face.

"Haven't a notion. Oh, yes, I have, though; you are my sister," and he breaks into an odd, dry little laugh.

"Of course I am," she responds, thankful for this crumb of recognition, and kissing him afresh; "I am your sister Dolly; and what is your name?"

"Rather a prettier one than Dolly," he remarks, with supreme contempt. "My name is Ferdinand Miguel Stapleton Travers. The other children call me Mig to tease me, but I do not like it. You must call me Ferdinand, or as that is rather long, perhaps Ferdie."

"Are you ill, Ferdie dear?"

"Of course I am. Did not you know that? I am always ill."

"Poor little darling!" says Dolly pityingly, and wondering what is the matter with him, as she seats herself by his side; then glancing at the clock, "What time does the post go out here?" she asks.

"Not till late. I suppose you want to write to those funny dowdy people you have always lived with, don't you?"

"What an intolerable child!" thinks Dolly, about to answer with dignity, when the door opens, and she starts up hastily, expecting to see Lady Travers. It is a gentleman, however, who walks in, and she jumps to the hasty conclusion that it must be her father. But when she looks at him she perceives at once that he is too young for Sir Augustus, and moreover a totally different-looking person. Shy and disappointed she resumes her seat by Ferdie's side, and wonders whether it will be long before Lady Travers appears.

"Come in from shooting?" asks Ferdie of the new-comer, as though he were his own age.

But the gentleman vouchsafes no response, only lays his hand kindly on Ferdie's head, and says, "You have no business here, young man."

He is a tall good-looking man, with clearly-cut marked features, and deep-set earnest eyes, in which however gleams a lurking sense of fun.

"It is very fortunate I was here, for otherwise there would have been no one to receive this young lady. Shall I introduce you to her? Miss Dolly"—with a great accent on the Dolly—"Miss Dolly Travers, Mr. Ingram."

Mr. Ingram looks puzzled, but Dolly's face lights up. It is like a bit of home to hear the name of Ingram, although possibly he is no relation to the unfortunate Holme Regis Ingrams.

"I am very glad to make your acquaintance, Miss Travers," he says, holding out his hand, yet looking puzzled even as he says it, "for I know your sisters, and was under the impression that with them I had seen all the family, but I find I was mistaken."

"Ha, ha, ha!" laughs Ferdie, "you are quite wrong. Why, who do you think Dolly is?"

Mr. Ingram puts his hand over Ferdie's mouth. "None of your impertinence," he says sternly. "Have I made a mistake, Miss Travers? Do you not belong to the Lodge out there?" and he points vaguely out of window.

"I knew you were wrong," chuckles the irrepressible Ferdie.

"I belong," answers Dolly, herself struck by the ludicrousness of the response, and blushing shyly, "I belong here."

"Yes," breaks in Ferdie, "it looks like it, doesn't it? She is just arrived. Father is out shooting, mother is riding with the Count—oh! how I wish you had seen him, he looked so miserable on Gunpowder—the children are out in the woods, and I am left to receive—my sister."

"Your sister! I beg your pardon, Miss Travers, a thousand times. Of course, I ought to have guessed, but the fact is I had no idea you were coming to-day," he adds, struck by the forlorn look in Dolly's face.

"I wonder you knew I had an elder sister at all," puts in Ferdie, "for we have heard very little about her. I happened to find out quite by chance that she was coming to-day or I should not have known myself who she was."

"He knows everything," says Mr. Ingram, turning to Dolly, and seating himself by her side. "Quite an oracle, are not you, Ferdie?"

"I won't be laughed at," squeaks the child. "Oh! I say," and his face changes, "I hear the horses, and mother won't like me to be here. Quick, carry me up-stairs."

"I will carry you," says Dolly, and advances to the sofa; but Mr. Ingram has forestalled her, has picked up Ferdie in his arms, and is bearing him swiftly to the door.

"May I come too, Ferdie?" asks Dolly anxiously, suddenly feeling that Lady Travers must be a very terrible personage to encounter.

"Oh, no," answers Ferdie, his little face looking irresistibly comic, "you must stay and say how do you do to mamma."

"Yes, do come, Miss Travers, never mind what Ferdie says, and I shall have the pleasure of introducing you to that elysium the schoolroom," responds Mr. Ingram; and, scattering her manners to the winds, Dolly forms part of the little procession up-stairs."

But they are too late. As they emerge from the ante-room a lady in a dark bottle-green riding-habit meets them at the door, followed by a tall fair man in spectacles, evidently a foreigner. Dolly stands rooted to the spot, quite fascinated by the fair beautiful face, that greets her with a sweet subdued smile, from under the tall black hat that sets off the yellow hair to such advantage.

"I must beg your pardon, my dear child," she says so softly, as she extends her hand to Dolly, and drawing her to her, kisses her first on one cheek, then on the other; "I had fully intended to be home to receive you, but unfortunately," and she glances at the tall foreigner, who is stroking his moustache rather confusedly, "we had an accident."

"I am so sorry!" murmurs Dolly, returning the embrace with interest, "but Ferdie has been entertaining me."

"Ah! yes, he was here, was he not?" and Lady Travers looks round for him, but both he and Mr. Ingram have disappeared.

"And now, my dear," she continues, "as I am very much later than I intended to be, I must take you up-stairs with me at once, and whilst I put on my tea-dress, you can take off your walking things, and come down-stairs, and have a cup of tea, which will do you good after your long journey;" and with a smile that little Dolly thinks absolutely angelic Lady Travers leads the way up-stairs.

It is a large house, and they have a long distance to traverse; up one flight of steps, down another, along passages, in and out of doors, then another flight of stairs, till finally they reach a region where the carpets are worn and the paint is scarce.

"I knew you would like to be near your sisters," says Lady Travers, with another of those sad sweet smiles as though life had been too much for her, "and so I have arranged a charming little room for you amongst them;" and, as she speaks, she throws open the door of as comfortless a little apartment as it has ever been Dolly's fate to see. But her stepmother has said it is charming, and so perhaps it will prove to be when she has put her pictures and pretty things about it. At present it sends a little chill through her as she involuntarily contrasts it with her cosy bedroom at the Vicarage. Meanwhile Lady Travers walks to the window and, lifting the sash, points to a wide flat expanse of meadow, stubble, and turnip fields. "There is a splendid look-out for you, Dorothy," she says. "You draw, do you not, dear? You will enjoy sketching up here, for this view is charming, and the more you know it the more it grows on you;" and with these words, adding that tea will be soon ready, and she must hasten down-stairs, where she hopes Dolly will join her before long, Lady Travers prepares to leave the room.

"Shall I see papa?" asks Dolly, hurrying after her, her warm little heart beating with impatience to see her father.

"Oh, yes, dear, of course you will; papa always comes in for his tea."

END OF CHAPTER THE FOURTH.

THE CHIFFONNIERS OF PARIS AT HOME.

BY A PARIS CORRESPONDENT.

THERE are in Paris upwards of 30,000 rag-pickers, who form a community apart, congregating together in "cités," that are hidden away in remote suburbs, rarely explored either by the dwellers in, or visitors to, the capital of pleasure. Through these cités, which are unfamiliar ground to most persons, I propose conducting my readers; but, before doing so, it will be well perhaps to commence with a few statistics.

Thirty thousand men and women trudge nightly through the city streets, seeking in the rubbish and refuse, in the sweepings of the boudoir and the kitchen, the saloon and the scullery, the hospital and the restaurant, daily bread for themselves and their families. This heterogeneous mass, which the fraternity of the hod and crook collect, finds its way eventually to the sorting-rooms (of which there are 200 in Paris), where the street-sweepings are sifted and sorted previous to reappearing in the world under new forms. About 1,000 men and 10,000 women earn their living in these *ateliers*, so we have a total of over 40,000 persons employed one way or another in the chiffonnier trade. The rag-pickers are divided into three categories: there are some—the *bourgeoisie*, so to say—who work on their own account, get the highest market price for their wares, and contrive, one day with another, to earn from forty to fifty sous per diem. These are looked up to by their colleagues as independent gentlemen and ladies, at the mercy of no hard taskmaster. A second class, lower down on the social ladder, are those who dispose of their findings at so much per pound, the good with the bad; these find it a hard matter to make the proverbial ends meet. And there is yet another category of chiffonniers, such as are paid a franc or less per day by the wholesale chiffon merchant, who is generally a thriving person, whilst his employés are the barefooted outcasts of society.

The cités inhabited by the rag-pickers and their families are principally to be found in the suburbs of Clichy, Levallois, Malakoff, and the adjacent neighbourhoods. A weary tramp it is from these far-off quarters to the centre of Paris; at nightfall they start with the hod, the lantern, and the crook, walking over miles of unprofitable ground by all weathers, to earn a pittance hardly sufficient to keep body and soul together. Their cités are stretches of waste land upon which are erected wooden huts, affording a very imperfect protection from the inclemency of the weather. A gust of wind carries away the roofs of the wretched sheds, a pelting rain enters by every crack; the air is thick with foul smells, the atmosphere breathed is contaminated with the exhalations of half-rotten vegetables, offal, filthy rags, bones—all, in fact, which in England is thrown into the dust-bin, and in France is nightly emptied into the streets.

The first cité that I explored was tenanted by the aristocracy of the rag-picking brotherhood who work on their own account. Even here, however, a strong dose of moral courage was necessary, for albeit that the Cité Cloys is the Faubourg St. Germain of the quarter, it is stamped with poverty, degradation, and insalubrity. It was close upon noon when I passed this cité in review; the night-labourers had returned, their hods had been emptied into the centre of the room, which served as bed-room, living-room, and warehouse. The majority of the men, worn out by their long tramp through the streets, had thrown themselves on the mattress, sacking, or heap of paper which stood in lieu of bed. Dingy-faced, matted-haired women were cooking the midday meal of the family; young girls and boys with hard-looking, unyouthful faces, were seated around the rubbish spread on the floor, sorting it. This was accomplished with the rapidity of experienced fingers. The paper was thrown here, the rags there; broken glass and crockery ware on one side, broken victuals on another; defunct cats and birds in this corner, remnants of wearing apparel in the opposite one, until in an incredibly short space of time the mountain had become so many mole-hills, the odour arising from the same being such as to make it a problem for me how it was possible for men, women, and children to live and sleep in the midst of such unspeakably foul smells without being overtaken by disease. And these were the relatively fortunate ones amongst this squalid population!

At a stone's-throw in the same street one comes across an archway over which is written "Cité Maupit." The ground on which this cité is constructed belongs, it is stated, to two or three deputies, who let it out to M. Maupit for 1,400 francs a year. The investment, I was told, is not a bad one for the latter. The wooden sheds he has built, each consisting of one room, he lets out to his ragged lodgers at two francs and a half per week, the rent being punctually claimed in advance under penalty of immediate ejection. To give an idea of the fragility of these sheds where the chiffonniers and their families live penned up like cattle, the following incident, which happened a few winters ago, will suffice:—On an unusually gusty afternoon ten or twelve of these "houses" were fairly carried off by the wind, and thrown a heap of débris to a hundred mètres distance from the spot were they had stood. The teachings of experience were not lost on M. Maupit; on the roof of every shed there are now placed huge stones to counteract the effect of the elements. The huts are revoltingly filthy, the dwellers therein not less so, and distress of the direst form is the normal condition of the poor people, who, according to the rules

of the cité, are bound to sell their findings at a fixed price to their landlord. He lives among them, and contrives to enrich himself by his enterprise. His house, consisting of two rooms, might lay claim to a sort of distant relationship with a museum: it contains a collection of art in its last stage of decrepitude, decay, and dismemberment. On the walls there is a fragment of an oil painting representing a moonlit landscape, which, to judge by what remains, had in its better days some artistic merit. There is a portrait of a knight of olden times, with many rents in the canvas; on the mantelshelf there is a bust of a king of France, with a damaged head, and the nose wanting; beside it is a Venus with no head at all. Amongst this rubbish is a quantity of caricatures dated 1830, whilst a corner beyond reveals a company of stuffed birds, over which is ranged a display of ancient china ware more or less broken. The carpet on the floor resembled a patchwork quilt, but as nothing matched anything in the room, the carpet was not out of keeping with its surroundings. In front of the merchant's door are huge heaps of wares waiting to be despatched to their different destinations. At one end of the enclosure is a wine shop kept by the landlord's nephew. When I entered the cité two tattered begrimed men were seated at the roughly made wooden table placed outside the cabaret. A woman of whom I asked some information invited me to seat myself beside these two gentlemen, and to question them, and thus I could learn all I wanted to know. But my companions remained taciturn. One, indeed, could not do otherwise, since he was dumb; the other, an old soldier who had served in the African campaign, bewailed a little his hard daily lot, but seemed too muddled in the head to prove a useful informant. All I learnt, in short, in reply to my questions was, that he slept on the paper he gathered in the streets, and that he changed it every four nights to get rid of the vermin. No doubt these two lodgers of M. Maupit were posted at his nephew's wine-shop table to attract the notice of any visitors who might chance to pass through the cité. The wine to which they were treated was surely charged twice the price the wretched stuff was worth, and the few coppers I left on the table for the men, I feel pretty certain were confiscated by the cabaretier.

After a cursory glance into several other miserable alleys, pompously styled cités, I proceeded to that known by the name of the Cité Fourcault, which is situated in the Avenue de la Révolte, a low-class disreputable neighbourhood, through which a nervous man would hardly care to pass after nightfall. The proprietress of this cité is (or rather was, for she has died since my visit to her unsavoury estate) a well-known character, who obtained a certain notoriety under the pseudonym of the "Femme Culotte," a name given her because she habitually donned masculine attire. It was she who built the cité called after her; it was she who ruled like a potentate in her tattered squalid kingdom; it was she who maintained order amongst her turbulent subjects, interfering personally in the daily frays, souvenirs of which she bore about with her in the shape of numerous scars on her grizzled head and wrinkled face. When she died a short time since, a paragraph was consecrated to her memory in the majority of the French newspapers. It is reported that she had amassed a large fortune, a statement I can well believe. Her estate was a productive one, and she used her unlimited power to trade upon the miserable population who filled her cité. She had about 400 tenants, each paying a weekly rent of two francs, which gives a total of over 40,000 francs a year. Perhaps, to purchase the ground and erect the hovels, she may have expended 25,000 or 30,000 francs; this would certainly be the maximum. It is easy, then, to understand that she died wealthy. Of course she was exposed to the risk of her lodgers becoming bankrupt, in which case the rent was not forthcoming; but as she generally exacted it in advance, and turned out those who failed to pay, without the smallest compunction, her pocket never ran great danger.

I will now sketch in a few words the aspect of the cité which is christened after the "Femme Culotte." It is difficult to describe the painful impression produced on one's mind on witnessing this corner of Paris, where misery, degradation, and vice, engendered by the most deplorable promiscuity of sexes, has set its stamp upon every surrounding, and every person. Frenchmen, after a brief visit to London, are fond of expatiating upon the poverty-dens to be met with there; they would do well to remember the proverb about dwellers in glass houses, and to look at home first. The Cité Fourcault is a long alley, on one side of which wooden huts are built, each having two rooms, let out to different families. On the ground floor there is a sort of cellar, it can hardly be called a room, to which air and light are admitted by an aperture which may at one time have been a window, but has in the majority of cases lost its unique pane of glass. An ordinary-sized man cannot enter the door without stooping. The floor is clay, and for all furniture there is but a revoltingly dirty mattress thrown in one corner, a crazy chair or two, and a hardly less invalid table. Dirt, foul smells, and vermin are the predominant characteristics of these pestilential cellars, which teem with living creatures who seem lost to all sense of decency or shame. How can it be otherwise, when grown men and women, youths and young girls, little children and infants, are huddled together in one room, parents sleeping side by side with big girls and boys, whose apprenticeship to vice begins almost with their birth? Scenes which the pen refuses to transcribe meet the gaze at every step in these hotbeds of immorality and disease. Persons stricken down with contagious maladies lie in these cellars swarming with human creatures, who appear as indifferent to the dangers of contagion as they are to the most elementary rules of cleanliness or decency. Through the doorway of one room on the ground-floor I saw a woman lying with her newly-born infant beside her, whilst her husband, dead drunk, was stretched on the heap of refuse he had just emptied from his hod. A girl of twelve, with a face of forty, was preparing some food for the sick mother and wailing infant, while half a

dozen smaller children wallowed half-naked in the dirt on the floor. The male population, I was told by the "Femme Culotte," were good husbands and fathers as a rule. There was little wife-beating, rarely ill-treatment of children, and she pointed out to me here and there amongst her lodgers certain individuals who had lived upwards of twenty years in the cité, working like slaves to provide for their families, paying their rent regularly, and rarely frequenting the wine-shop. But the cité, of course, was not without its *mauvais sujets*, who were ready to rob, drink, fight, and caused the masculine-looking landlady much trouble at times.

After inspecting this haunt of misery and vice, I thought there could remain nothing more in the chiffonniers' cités to be seen. I was mistaken. Not far off, I was told, was the Petit Mazas, a cité so hidden from sight that, after its locality had been indicated to me, I went round about the cité during half an hour before lighting on it.

The agglomeration of unspeakably filthy hovels which go by the name of the "Petit Mazas," are concealed from public view by a decrepit, crazy wall, through an aperture in which one passes to obtain access to the cité. It is difficult to imagine that within a few miles of the luxuriant Boulevards such a place can exist, and it is incredible that the town authorities have not long ago swept it away. One would imagine the Petit Mazas was never visited either by a *sergent de ville* or a health officer. The hideously dirty cellars in which the rag-pickers live are a disgrace to a city which boasts of being the capital of civilisation. The sights and smells make one feel sick, morally and physically. From stagnant pools of dirty water the most nauseous emanations arise. The huts, made of mud, are reeking with foul humidity. The commonest necessities of life are not provided for in these squalid hovels. When I passed through the Petit Mazas, the July sun was beating down upon the alley. The smells arising from the heaps of refuse, and the pools of slimy water, were insupportable, to me at all events, for the ragged creatures who seemed hardly to have either sex or age, that live here, were apparently impervious to offensive sights or smells. They were eating and drinking outside the doors of their hovels, a barrel turned on end or a rickety chair serving in lieu of a table. Some were sleeping stretched across the narrow strip of ground which separates the huts from the dung-heaps, their feet within the doorway, their heads almost touching the foul-smelling accumulation of filth. As far as I could judge from a cursory glance, the huts seemed almost devoid of furniture. In a few I caught a glimpse of a mattress, but the majority appeared to be provided with no sort of bedding. Yet on the walls of some of the huts I perceived a print almost effaced by dirt, or a cage with a canary in it, or a bunch of artificial flowers, found probably in the streets, and hung to a nail in the wall, to enliven the dismal poverty of these wretched habitations. There was one old man, now infirm and bent with age, who told me he had been born in the Petit Mazas. He had contrived to reach the age of eighty in this pestilential den of vice and destitution. There were young girls, who had been born and bred here, who had been reared in these hovels, and who, whilst yet almost children themselves, become the mothers of other children, miserable, sickly little beings, whom it made one's heart ache to contemplate.

I cannot pretend to decide whose task it should be to ameliorate the lot of the wretched population which fills the rag-pickers' cités. But that blame must be attached to some one is evident. In the present age of progress and civilisation, no community of French citizens should be allowed to drag out their existence in pestiferous mud-huts totally unfit for human habitation.

HINTS FOR PAINTING ON TERRA-COTTA.



PAINTING on terra-cotta divides with china-painting the favour of a great many amateurs who, though with skill in handling the brush, and a taste for colour, have not the power, nor perhaps the time, for undertaking a large picture. There are numbers of articles in white and red terra-cotta sold now, which are admirably adapted for painting on; and I propose, in a short paper, to give a few hints towards their effective decoration. I think it will be better for those wishing to learn, for me to suppose I have an article before me ready for painting, and the instruction I propose giving will be then clearer and more easy to follow. First, let me say that there are two ways of painting on terra-cotta, in oils and water-colours, the latter aided with Chinese white. The medium most prefer is that of oils; water-colours and Chinese white are more difficult to work, and less satisfactory in their effect when done, and also they are liable to crack and "cake off" in hot or dry weather.

On the table before me I have a round red terra-cotta plate, seven inches across. Very few colours will look as well, and none better, on this red than yellow and green. On this plate I intend to paint sprays of marigold. I take a sable or a camel's-hair brush, dip it into some chrome yellow, using turpentine



as a medium, paint over all the flowers and buds, but not thickly, then I mix with the yellow some cobalt blue and a little brown, and paint over the leaves and stalks, working in white where the lights are strong. I must take care not to work with my colours too liquid, as when once they have run over the outline it is impossible to rub them out, and there will always be stains, unless the design can be judiciously extended so as to *cover* the stains. The first flat tints will soon dry, the terra-cotta being very absorbent. Some people gum over the design, so as to some extent to fill up the pores, but I find it better to let the pores be filled with the colour. At first it will be found very difficult to work the colour; it is apt to go in little ridges and sometimes to peel off in flakes; this last is occasioned by the medium not being properly mixed with the colour, and it therefore soaks into the plate, and the colour dries too quickly. It is to be avoided by careful mixing and careful working. When it happens, you must fill in the blank spaces by touching them with the point of the brush charged with well-mixed colour, taking care not to rake up the colour at the sides. On the plate before me I have painted one spray with two flowers and a bud, and one spray crossing it with one flower and a bud; a small yellow and brown butterfly sufficiently relieves any blank space left. I have painted all over the flowers with chrome yellow. The centres of them now require to be touched up with cadmium and a little Indian yellow, the shadows composed of brown and grey. Blue must be sparingly used in the shadows, and white too. The latter, of course, is required at times, but it is liable to make shadows muddy-looking. The colours should be clean and clear, as they thus stand out better from the ground. The various details of light and shade I must leave to the practical experience of my readers. They vary, of course, according as to whether you wish the flowers to be as if painted in full light or in shadow. The plate, I consider, will be improved if I put a narrow border round the rim, either within the rim or actually on it. As a relief to the yellow and red, I mix a little Antwerp blue with white, and a slight touch—a very slight touch—of yellow. These ingredients compose a soft turquoise blue, and it looks very well as a border to the marigolds. When my design is thoroughly dry, I shall take a clean soft brush and dip it in some picture copal varnish, or mastic varnish, and shall go over the shadows of the whole design. When that too is thoroughly dry, I shall go over with the same varnish the rest of the design, excepting the border. I here warn my readers to be careful in putting on this varnish: it must not be put on thickly, as it will then dry in ridges. Where you see a ridge





appearing, you must carefully drag it off if it is moist; but if it is already dry, you had better leave it or else scrape it off with a sharp knife, and then go over again with the varnish.

Space will not permit me to give long descriptions of designs, but I think it will only require a few lines more to help to put beginners in the way of starting and working for themselves. If your plate is made of the white terra-cotta, I advise you to paint a background on it, as, though the white ground might throw up your design, it is not pretty in itself, and is liable, too, to show the least mark or smear.

The turquoise-blue I have mentioned makes an excellent background for yellow flowers. A background can be put on more liquid than the design, and with a larger brush. An effective design on a long, rather narrow plaque, is the wild yellow iris, the stalks springing from the bottom, and the top flower stopping about an inch from the summit. These flowers look particularly well on a graduated blue background. When you wish to have the design stiff and so-called conventional-looking, you must outline all the details. Vandyke brown is a good colour for outlining. Great care must be taken in outlining not to let the colour run. I have recommended simple spirits of turpentine as a medium, because I generally use it myself; but where I have had to put the colour on in thick masses, and I have not wished it to dry quickly, I have sometimes used megilp. However, do not use medium at all unless it is absolutely required.

Be careful always to begin your work with clean brushes. After using, plunge them into a jar of soft





soap and water, the colour will then come off almost immediately, and then, if they are wiped into shape on a soft, smooth rag, they are kept soft and pliable; be careful, too, that there are no hairs in the brush liable to come out. A pretty, carefully drawn design is often spoilt by not giving sufficient attention to such details.

I do not think heads look well painted on terra-cotta, but small cherubs floating amongst flowers, if they are very carefully and clearly drawn, are

effective, particularly on a vase. Butterflies and birds are suitable also for terra-cotta decorations, but flowers, or flowers and butterflies, are best of all. Be careful never to paint butterflies unlike nature, or butterflies alighting on flowers which in nature they would never alight on. For instance, do not paint a butterfly, which does not make its appearance till June or July, alighting on a snowdrop or a daffodil, and do not paint a bright Robin Redbreast hopping on a crimson summer rose.

I will close this paper by a short list of designs for vases and plates.

For a tall, narrow, white terra-cotta vase: On one side a tall spray of purple monkshood, on the other side a short spray of same, with a bee flying to one of the flowers. Background: pale yellow, graduating to a light brown.

For a tall, narrow, red terra-cotta vase: On one side, and stretching round a little way to the other side, a straggling branch of honeysuckle; a tortoise-shell butterfly.

A round white terra-cotta plate, twelve inches across: Sprays of yellow jasmine; ground, turquoise-blue, graduating towards peacock-blue.

A round red terra-cotta plate, twelve inches across: A group of ox-eyed daisies, nearly filling the plate, also some flowering grass, and a yellow butterfly. H. C. F.

POISONS AND THEIR ANTIDOTES.

BY A FAMILY DOCTOR.

FATAL cases of poisoning are happily rare. In an estimated population of, say, 22,000,000, with an annual death-rate of probably 500,000, poison would be the death-cause in not more than 400, of which number 300 would be due to accident or negligence, and the remainder to suicide. But notwithstanding the paucity of fatal cases, I believe there is no accident more common than that of poisoning, and remembering how sudden and terrible are the effects of poison introduced into the system, surely no head of a family can err in making himself acquainted with the general symptoms of poisoning, and the usual method of treating cases thereof.

Now, before giving the usual symptoms, and laying down general directions for the treatment of poisoning, I have just one remark to make. I am gratified to know from many sources that many of my readers keep the Family Doctor's papers for future reference. Well, I can imagine my present article laid carefully aside by some thoughtful individual in case of future emergency, and I can imagine that, that emergency arising, there would certainly not be time, even if the consulting party possessed sufficient coolness, to sit down and peruse the whole paper, short as it is; I have therefore had the name of each poison printed in prominent type, so that by merely running the eye over the page it can be seen at a glance, and the antidote likely to be available discovered.

It would serve no useful purpose here to enter into a dissertation on the nature of poisons, or their modes of action, or the many curious facts concerning them. Let me simply say that a poison is some agent which, on being introduced into the system, gives rise to symptoms inimical to the health of the individual, which may or may not end fatally.

The symptoms which ought to give rise to a suspicion of poisoning are many and varied, but if after partaking of any food or drink sudden pain is felt, with probably great nausea, sickness, and vomiting, and a general feeling of *malaise*, or with cramps about the stomach or limbs, and cold sweats; or if, on the other hand, head symptoms come on suddenly after eating, such as great drowsiness, giddiness, or stupor, then it may reasonably be inferred that the person so suffering has partaken of poison.

In a case of this kind the very first duty of the patient's friends is to hurry off at once for a doctor. Do not send a servant, let some one more interested go; and let the messenger not forget to state to the medical man what the nature of the case is supposed to be, that he may come prepared, for everything depends on the speed with which remedies are adopted.

Meanwhile the person supposed to be poisoned is not to be left unattended until the doctor appears. Every effort must be made to get rid of the poison and to combat the effects thereof. In a large number of cases an emetic is the very first thing to be administered. The exceptions are those in which an irritant poison has been swallowed, causing inflammation of the stomach. Here an emetic would only serve to increase the mischief, and lessen the chances of saving the patient. Some simple emetics are always at hand. We have a good and handy one in mustard; a tea-spoonful should be mixed in half a tumblerful of lukewarm water, and this should be given about every minute until vomiting is induced, which ought to be kept up by plenteous draughts of warm water, and probably by tickling the fauces or inside of the throat with a feather. A table-spoonful of common salt in a tumblerful of warm water, is another very simple but usually efficacious emetic. Twenty grains of sulphate of zinc is a good and non-depressing emetic, but not

so ready to hand as those already mentioned. In a large number of cases the stomach-pump is the proper agent to be used, but this the medical man must see to.

As a general rule, then, emetics are to be given at once after poisoning by the narcotic class of poisons—those that produce drowsiness, stupor, or delirium.

A second general rule is this: Give eggs, chalk, magnesia, milk and warm water in cases were there is intense pain in the stomach accompanied by vomiting and retching.

Examine every glass or dish from which the sufferer may have drunk or eaten (the smell may guide you to a knowledge of the kind of poison swallowed), and lock them up for future medical examination. Whatever the patient may have passed or thrown up should also be put under lock and key.

What are called **Irritant Poisons** are such as produce some sensation of pain or irritation about the mouth, the throat, and the stomach. If a strong acid has been swallowed, such as vitriol or hydrochloric acid, the irritation would amount to actual corrosion, but in other cases there would be only a burning sensation on the tongue and in the mouth generally, with most likely constriction of the throat. The pain in the stomach is usually accompanied with tenderness to the touch. This same pain, often coming on suddenly, is a symptom of one or two other diseases—a fact that only proves the necessity of the instant attendance of a medical man. In irritant poisoning you will also have vomiting, and very likely diarrhœa.

In poisoning by **Narcotics** you will have a different train of symptoms, because both they and sedatives affect the nervous system; the drowsiness or stupor will here guide you. There may also be a peculiar rattling in the throat, called by the faculty "stertorous breathing," while there may be sinking at the heart, and flushing or lividity of the countenance. There is a class of poisons which produce symptoms akin to both of the former; they are called narcotico-irritants; here you will have the burning sensations in the mouth, followed by the narcotic and nervous symptoms.

I will now proceed to specify briefly the symptoms of, and antidotes to, some of the more common poisons individually.

Accidents from swallowing **Opium** in some form are very common. The opium may be in the crude state, or in the form of **Laudanum**, or it may be **Morphia** that has been swallowed. In either case the symptoms will be the same—viz., drowsiness, stupor, sleep, from which the sufferer can with difficulty be aroused, and contracted pupils. Give emetics of mustard or sulphate of zinc or copper.* Prevent the patient from sleeping by walking him up and down the room, cold water dashed over head and chest, and galvanism. I had almost forgotten to mention strong coffee, and plenty of it, and the application of smelling-salts to the nostrils. The same treatment may be adopted in cases of poisoning from **Camphor** or **Paregoric, Deadly Nightshade Berries, Fool's Parsley,** or any herb or berry where the symptoms are narcotic in their nature.

It will hardly be in the power of any one not possessed of medical knowledge to distinguish between the symptoms of poisoning produced by **Mercury,** whether **Calomel, Corrosive Sublimate, Red Precipitate,** or **Vermilion**; and those by **Copper,** whether **Verditer, Verdigris,** or **Blue Vitriol**; or those of the **Salts of Zinc, Tin, Gold,** or **Silver.** Happily they have all many symptoms in common—notably, the disagreeable rough metallic taste in the mouth, the griping and pain in stomach and bowels, the violent thirst, the sickness and vomiting (in the case of mercury, of bilious fluids), the headache, cramps, cold sweats, and probably convulsions. The vomiting is be encouraged by plentiful draughts of warm water, and eggs given beaten up with milk, of which give an abundance. Give also flour, beaten into a paste with milk. Foment the stomach and bowels with very hot fomentations of poppy-heads. This is really about all you can do till the doctor arrives.

While milk and raw eggs may be given in poisoning with the salts of **Lead,** an emetic should be given, and immediately afterwards sulphate of magnesia, usually called Epsom salts, should be administered.

In poisoning by **Tartar Emetic** or by **Butter of Antimony,** the vomiting and retching are usually very violent; there is also great pain at the pit of the stomach, with frequent cramps and hiccough, and also diarrhœa and pain in the bowels. Encourage the vomiting by large draughts of milk, followed by strong tea, or the decoction of oak-bark or cinchona-bark. Magnesia in the milk will do good.

There are a large number of substances sold in the shops of which **Arsenic** forms an ingredient. Poisoning by this metal is therefore very common indeed. The symptoms are similar to those caused by other irritants, although they do not as a rule come on so speedily. There is a burning sensation in the stomach, followed by pain and vomiting, which consists of greenish matter often mixed with blood; there is great prostration, with difficulty of breathing, and hoarseness and faintness of voice. There will soon after be griping pains in the bowels, colic, and diarrhœa. In bad cases convulsions follow, and death soon closes the scene. The patient must have an emetic at once—the first and quickest to hand; also plenty of milk, with white of egg, or the eggs themselves, beaten up. The antidote perhaps most often relied upon is what we call the hydrated oxide of iron—in other words, iron rust. It can be scraped off any rusty piece of iron. The pain in the bowels should be combated with poppy-head fomentations, as hot as the hand can bear them. The after-symptoms will be treated by the physician who has been called in.

* EMETICS FOR CASES OF POISONING.

1. Mustard.—A tea-spoonful every minute in warm water; or commence with a dessert-spoonful, or even a table-spoonful.
2. Common Salt.—A table-spoonful in a tumbler of warm water.
3. Sulphate of Zinc.—From twenty to forty grains in warm water.
4. Sulphate of Copper.—From ten to fifteen grains in warm water.

Adjuncts.—Tickling fauces with a feather, and copious draughts of warm water.

The symptoms of poisoning by any of the strong acids, such as **Nitric** or **Hydrochloric Acid,** or **Oil of Vitriol,** are very distressing. There can be little doubt about a case of this kind. If the acid has been very strong, lips and mouth will be raw, and probably the former blackened; the pain in the gullet and throat will at all events be intense. There will be vomiting of matter mixed with blood, and great tenderness about the region of the stomach. Give chalk at once in water, in sufficient quantities to neutralise the acid, or calcined magnesia. Carbonate of soda, or potash, is an antidote, or thick soap-suds. Give also abundance of water to weaken the acid; and if nothing else is at hand, break down the plaster from the wall, mix in water, and administer.

Prussic Acid is terribly speedy in its action, and there is no antidote that I know of that can be relied upon. If enough has not been taken to prove immediately fatal, stimulants, such as brandy and ammonia, may be tried, if they can be swallowed. Dash cold water over the chest and face. An emetic may also be given as soon as it can be taken, with coffee afterwards.

Mezereon Berries are often eaten by children; so are **Monk's-Hood Seeds,** though more seldom. These belong to the narcotico-irritant class of poisons, as do many other berries and seeds. The symptoms I have already noticed. The antidotes are emetics, plenty of milk or barley-water, and afterwards strong coffee and a mild aperient. The same treatment would be recommendable in poisoning by **Stramonium,** usually called **Thorn-Apple,** which children often eat. Stupor must, however, be treated by dashing water over the head and face, and applying smelling-salts to the nostrils. A few drops of laudanum might be given with advantage.

The symptoms of poisoning by **Belladonna** are somewhat similar to those produced by stramonium. Contrary to what you find in opium-poisoning, the pupils here are very much dilated. Give emetics and animal charcoal, followed by castor-oil.

Animal charcoal and olive-oil, with chloroform to lessen the terrible spasms, are usually given as antidotes to the poison called **Strychnia.** Emetics must, however, be given first.

The same rule of treatment holds good in cases of poisoning by **Intoxicants,** such as **Alcohol,** and in those produced by breathing **Obnoxious Gases.** The face is generally livid in the latter. The sufferer should be placed on his side, with the head slightly raised. He ought to have plenty of fresh air, while cold water may be dashed in the face, the chest rubbed with stimulants, and warmth applied to the feet and legs. If an emetic can be given, so much the better, and afterwards strong coffee should be administered.

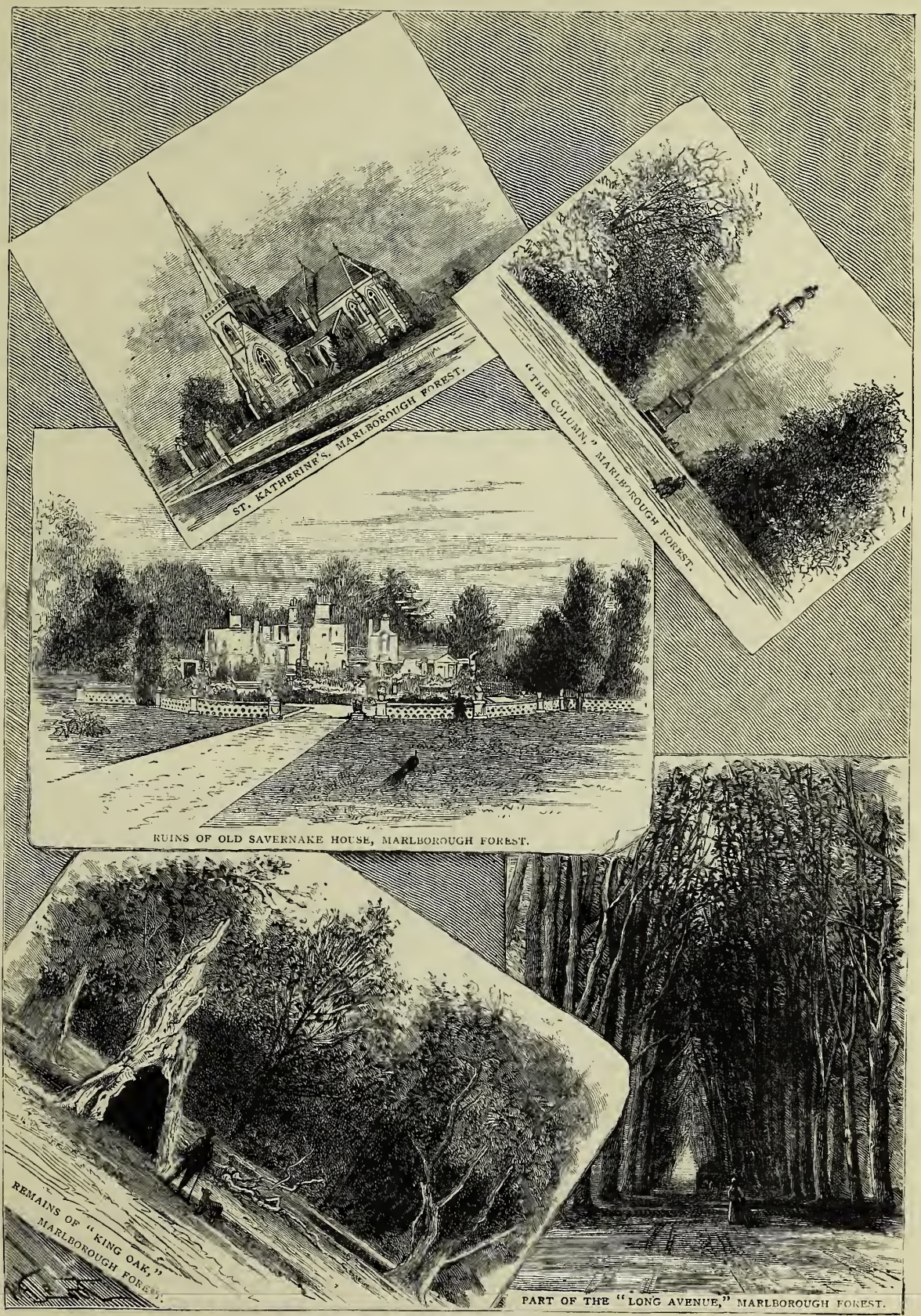
It should not be forgotten that after the recovery of a patient some after-treatment will be needed. For the first few days the very mildest and most easily digested of foods should be taken. If the poisoning has been by an irritant, in all probability the patient will be in the doctor's hands; if not, my advice is that milk, beef-tea, arrowroot, sago, &c., form the staple of his diet until he feels sure he can digest stronger meats.

Before closing this paper, I cannot help once more warning my readers against the use in any shape or form of that slow poison, *hydrate of chloral.* When used nightly, it becomes a habit which it is next to impossible to shake off. The symptoms it produces are very distressing, and there is assuredly only one termination if the habit be not broken off at all risks —namely, death.

A HOLIDAY IN AND AROUND SAVERNAKE FOREST.



AMID all the changes that have altered the face of our country since the days when the Ancient Britons—those "careless sons of nature—roamed the forest wild, at once their verdant city, high embowering fane, and the gay circle of their woodland wars," there has been, perhaps, no part of England left more unchanged than that known as Savernake Forest. There are the modern "avenues," "drives," and "walks" intersecting it in all directions, it is true; but within its recesses are spots undefiled by man's "improving" handiwork, and which remain to this day almost as our great ancestors bequeathed them to us. No description of mine could impart any adequate idea of their sylvan beauty, or of the quiet calm that pervades their sequestered precincts. The mighty oaks, strong in their centuries of strength; the towering beeches glistening in the sunshine, and casting beneath their shade a "dim religious light" around; the gnarled and twisted thorns, the bracken-covered hollows, the grassy glades, all combine to gladden and surprise the eyes of the beholder, and to impart to the wearied spirits a welcome sense of refreshment and invigoration. I know of no place where the wearied Londoner could find such perfect repose in conjunction with so much to interest and to please. Savernake Forest is situated just within the county of Wilts, and north of Salisbury Plain, from which it is separated by



IN AND AROUND SAVERNAKE FOREST.

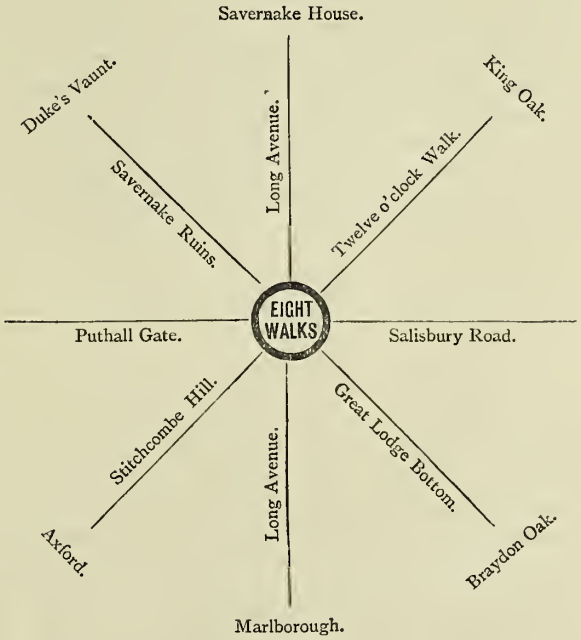
the Vale of Pewsey. The Berks and Hants Extension Railway, and the branch line to Marlborough, skirt it on the south, and the stations at Great Bedwyn, Savernake Forest, and Marlborough bring it within easy reach of the tourist. It is said to derive its name from *Saverne* (a species of sweet fern), and *acre* (land), and at one time extended over a great part of the surrounding country. It is now about sixteen miles in circumference, and covers an area of about 4,000 acres. It forms part of the Marquis of Ailesbury's Wiltshire estate, and is the only forest in the kingdom owned by a subject. In the time of Edward III. it was assigned "as part of the jointure of Queen Eleanor, and was held in the same manner by several succeeding queens." It afterwards came into the possession of the Dukes of Somerset, from whom it passed into the hands of the present owners. Large herds of deer inhabit its recesses, as they appear to have done in the time of "Good Queen Bess," for Lord Ailesbury has in his possession warrants to the keepers, signed by that illustrious monarch, for the supply of venison. As may be expected, the forest is a favourite resort for health-seekers and pleasure-parties from all the surrounding neighbourhood; for though no public meetings of any kind are allowed, except by special permission of the noble owner, free access by private parties is kindly permitted to every part. It is well for the stranger-visitor to note his bearings carefully before venturing alone into the unknown depths of the forest. The accompanying plan will show the *principal* "walks" or "drives" by which it is intersected. They are known as the "Eight Walks," and they diverge from a common centre, situated at about the middle of the forest. The grandest is that known as "The Long Avenue," and which extends for a distance of about five miles in a straight line from Savernake House to the iron gates on the top of Marlborough Hill. It is lined on both sides by magnificent beeches, whose tall trunks tower upwards like the clustering columns of some stately cathedral, and whose branches, thickly interlacing overhead, arch over and closely imitate its groined roof. A writer truly says: "The growth is so regular and so perfect that the comparison springs unbidden to the lips, and here, if anywhere, that order of architecture [the Gothic] might have taken its inspiration. There is a continuous Gothic arch of green for miles, beneath which one may drive or walk as in the aisles of a forest-abbey." Many famous specimens of grand old oaks are scattered about in the forest, some of which must have occupied their places for many centuries. Among them we may mention particularly the King Oak, the hollow trunk of which now only remains, though some of its largest branches have fallen within the last few years. Then there is the famous "Duke's Vaunt," so called because it was the pride of the Protector Somerset, who owned the forest in the reign of Edward VI., and who took great interest in trees. Though centuries old, it was then in its prime, and has still the largest trunk of any tree in the forest, though owing to a recent accident, by which it narrowly escaped destruction by fire, its huge dimensions are not now so apparent as formerly. Besides these there are the "Braydon Oak," the "Queen Oak," the "Big-bellied Oak," and others, all worthy of particular attention.

Savernake House stands on the extreme eastern verge of the forest, and occupies the site of a more ancient palace, built by the Earl of Hertford, son of the Protector Somerset, and which was destroyed in the time of the Civil Wars. It is the Wiltshire seat of the Marquis of Ailesbury. Near it were found, a few years since, the remains of a Roman villa. They are still sometimes exposed for the edification of special visitors, but as a rule are kept covered up, for the sake of their better preservation. Surrounding Savernake House is a noble deer-park, bordered by beautiful avenues, and on its northern edge stands the interesting church of St. Katherine, built by Mary Caroline Lady Ailesbury in 1864, in memory of her mother, the Countess of Pembroke. The remains of the late Marquis of Ailesbury rest within the churchyard, under a massive white marble cross. About two miles from Savernake House, on an elevation at the edge of the forest, is a lofty column erected in 1781 by Thomas Bruce, Earl of Ailesbury; and about two miles from Marlborough is another prettily situated church at Cadley or South Savernake. Savernake Ruins are situated in a pleasant glade not far from the centre of the forest. They are the remains of a lodge inhabited by the late Marquis of Ailesbury when Lord Bruce, and which was partially destroyed by fire in 1861. It has never been rebuilt, though the surrounding grounds have been still kept up, and are constantly used by pleasure-parties, by permission. They form an excellent spot for a summer picnic.

Surrounding the forest itself are many places of interest, historically and otherwise, and all more or less easily accessible. First we may mention Marlborough, an ancient borough lying under its very shadow in a valley drained by the river Kennet. Its well-known school occupies the site of an ancient castle, whose keep stood on the famous Druidical mound still standing within the college grounds. Within this castle was a chapel, and tradition asserts that in its black marble font both King John and Edward the Black Prince were baptised. The font was afterwards—on the dismantling of the castle—removed to Preshute Church, close by, where it is still to be seen.

About six miles distant are the celebrated Druidical remains at Avebury. These are well worth a visit. A writer thus describes them:—"On an extensive tract of level ground, bounded on all sides but the north by gentle hills, stood a circle, probably a double circle, of huge stones, varying in height from five to twenty feet, the circle having a diameter of 1,400 feet. Within it stood two lesser double circles, not concentric with it, nor with each other, nor in contact, one of them having a single tall stone near its centre, and the other enclosing three similar stones. A deep ditch surrounded the whole, and outside the ditch was a lofty rampart of earth. The area within the

rampart was equal to nearly twenty-nine acres. On the southern half of the work were two spaces left open for entrance. The approach was by two avenues formed by double rows of upright stones, sweeping in long graceful curves, one towards the south-east, the other towards the south-west. The former was above a mile in length, and terminated in a small double oval of stones, at Overton Hill. The latter was a mile and a half long, and terminated in a single stone, of larger size than the rest. At the distance of about three-quarters of a mile to the south of the site of the great circle, and nearly midway between the two stone avenues, is a conical mound of enormous dimensions, measuring in height 170 feet, and in circumference above 2,000 feet, and covering a space of more than 5 acres. This mound is called Silbury Hill, and is the largest tumulus in Europe. One interesting fact in proof of its great antiquity is, that the Roman road between Bath and London bends round the south side of the hill."



The village of Avebury, for the most part, stands within the great circle. The number of stones still existing within its enclosure are not many more than a dozen, though when visited by Aubrey in 1648 there were forty-eight; but many of them have been from time to time broken up for repairing the roads, or for making stone fences. It is supposed that originally there were 660 stones altogether, including those comprised in the two avenues. Not far from Silbury Hill are numerous stones scattered irregularly over the ground, and which, from their resemblance to a flock of sheep, are known as the "Grey Wethers." There are similar stones in the Dene at Lockeridge. The neighbouring hills are covered with remains of cromlechs, circles, and tumuli.

About a mile and a half from Marlborough stands the picturesque village of Mildenhall, which occupies the site of the Roman station Cunetium. Many coins and tesselated pavements have been discovered here, and show that the Roman town extended far up the side of the hill, towards what is now known as Folly Farm. A Roman road still in existence connected this town with Bath.

About four miles from Marlborough is Barbary Camp, a very large ancient British entrenchment, circular in form, and surrounded by a double ditch and rampart. Here, in a conflict between the Britons and West Saxons in 556, the former were defeated with great slaughter. There is also a similar camp, probably occupied in turn by both Britons and Romans—but most certainly by the latter—on St. Martin's Hill, about four miles from Marlborough, from whence an extensive panoramic view of the whole of the Pewsey Vale can be had, and from which the spire of Salisbury Cathedral, twenty miles distant, is on a clear day plainly visible.

Between Fyfield and Clatford—about two or two and a half miles from Marlborough, and about half a mile from the road, on the right hand—is a cromlech, which has been bared of all its superincumbent mould, and consists of two large stones standing erect and supporting a larger one on the top. It is popularly known as "The Devil's Den."

About six miles from Marlborough is Ramsbury, now only a village, but in former times a place of great importance, and up to the tenth century the seat of the Wiltshire bishops. The see was afterwards united with that of Sherborne in Dorsetshire; and in 1072 Sarum became the seat of the bishopric. Up to this time the Church of the Holy Cross at Ramsbury was the cathedral and the mother church to that at Sarum. It still possesses many interesting monuments.

Great Bedwyn, a large village on the Berks and Hants Railway, and at the eastern extremity of Savernake Forest, is a place of great antiquity, having existed in early Saxon times under the name of Bedgwyn, or (as given in the Saxon Chronicle) Bedan-heafod. It was then a place of considerable importance. From 1300 to the passing of the Reform Bill it returned two members to Parliament. But the glory of Bedwyn has departed, and during the last few years its ancient prison and town hall have been demolished. The cruciform church of St. Mary contains the bones of many of the Seymour or St. Maur family, and of several Marquises of Ailesbury; and an ancient cross stands just within the churchyard walls. Rather more than a mile distant lies the village of East or Little Bedwyn, through which passes the ancient "Wansdyke," generally supposed to have been erected by the Ancient Britons as a protection against the Romans, and which, consisting of a lofty rampart and deep ditch, runs through the greater part of Wilts and Somerset. It is also clearly defined between Lockeridge and Alton, not far from Marlborough.

Between the two Bedwyns is a great British earth-

work known as Chisbury Camp, enclosing an area of fifteen acres. Within it are the ruins of one of the four ancient chapels of ease to the mother church of St. Mary at Bedwyn, which up to the time of the Reformation existed respectively at Chisbury, Little Bedwyn, East Grafton, and Marten. That of St. Michael at Little Bedwyn is the only one remaining. The foundations of those at East Grafton and Marten were unearthed a few years ago. The ruins at Chisbury Camp are, with foreign additions, utilised as a barn! Another church has been built at East Grafton, not far from the site of the more ancient one, and is dedicated to the same patron saint—St. Nicholas. Marten is a small hamlet about a mile from Grafton, and at the very extremity of the Pewsey Vale, lying under the downs which form its eastern boundary, and which, stretching for several miles towards the north-east, culminate in the height known as Inkpen Beacon, at the point of junction of the three counties—Wilts, Berks, and Hants. The spur of the down near Marten is deeply entrenched, and is known as Bottle (Battle?) Hill. In Saxon times it was the scene of a fierce conflict between Wulfhere, King of Mercia, and the men of Wessex. The former had invaded the territory of the latter, with a view to its annexation. But, as the ancient Chronicle tells us, "the fat and short-winded" Mercians were no match for the Wessex men, who were lean and powerful; and they were driven back northwards beyond the Thames, and eventually became the subjects of those whom they had hoped to conquer. From the crown of Bottle Hill, as indeed from the heights of most of the neighbouring downs, extensive views of the country on all sides can be obtained—of breezy hills and cozy hollows, drowsy hamlets and waving cornfields, woodland and hedgerow, hillside and dale, stretching away in the hazy distance as far as the eye can reach. The air, too, is fresh and soft and invigorating, and we feel its beneficial effects in the gradual sense of exhilaration creeping through our veins, and in the unwonted yearning for something wherewith to satisfy the cravings of the "inner man."

In the parish of East Grafton, and about a mile from the village, is a farm-house known as Wolf Hall, occupying the site of a more ancient building, once the seat of the Seymour family, and the birthplace of Lady Jane Seymour, who in 1536 became the wife of King Henry VIII. The wedding was celebrated here, and the old barn in which the tenants danced on the occasion is still in existence, though in a very dilapidated condition. The old mansion was pulled down in 1582, and the materials were removed by the Earl of Hertford to the present site of Savernake House, rather more than a mile distant.

W. M. A.

HER CHILD.

MOTHER and I were sitting by the fire on Christmas night. Twenty happy years we had spent together, almost alone, for father died before I knew him; and we had never been rich, and were perhaps a little selfish, for we loved each other so heartily that we could scarcely spare time from each other for the few of our own class whom we came across, who being better off than ourselves, and holding themselves rather higher, seldom seemed to need our help or sympathy. We had plenty of poorer neighbours whom we loved and who loved us, but they in no way interfered between us or made the happiness we felt in being together less complete. It was only in the last year that a new strong interest had come into our lives, and this Harry brought; and on New Year's Day he and I were to be married. From the first moment when he brought me home to mother, having picked me up from the muddy pavement, where I had fallen bruised and helpless in the midst of a crowd, she seemed to take him into her heart, and never from that day did she let one jealous feeling come between her and me. Of course she was to live with us, even Harry could not have made a home for me without her, and the only thing she ever did which for the moment we thought hard was when, a week before, she had insisted on Harry's going home for Christmas. "Go to your father and mother, Harry, and leave Janet with me," she said. "You and she hope to be together all your lives; give us old folks one more chance of feeling you all our own." And Harry, with a look at me to see what I thought, had agreed.

So that Christmas evening mother and I were alone. There had been something in mother's manner all day which I could not understand. She seemed to have something on her mind. She was loving and tender to me, so tender that I thought that no one had ever had a mother like mine, and yet sometimes when I spoke to her she scarcely heard me. But we had a quiet, happy day—we always were happy together—and late in the evening mother sat down in her chair by the fire and said—

"Come and sit here, Janet, on your little stool, and put your head on my knee. I have a story to tell you to-night."

"A story, mother dear! Oh, that is lovely, like being a child again!"

"It is a true story, Janet, of your life and mine. I have never cared to tell it to you before, but I am not afraid now—my child and I have loved each other all these years—no, I am not afraid."

"What *could* you be afraid of, dear mother?"

"You shall hear and judge," she said, putting her hands on my head, and then she began:—"When I was young, younger than you are, I was engaged to be married. My home was very unhappy,

and when Andrew Western came and asked me to marry him I was ready to revere the ground he trod upon. He had been coming backwards and forwards to our house for some time on business with my father, and I believe that from the very first day he saw my misery. We were—and to my remembrance always had been—poor, but if I had been a boy my father would have possessed thousands a year. I never wondered that he hated me, that my mother mourned and fretted from morning till night; they had brought me up to feel guilty of a crime, and I did feel it in my inmost heart. It was no marvel that, when Andrew asked me to marry him, I looked upon him as an angel of deliverance. I loved him with an intensity which amazed and frightened him. It was in vain he tried to make me sober and reasonable. It was in vain he told me that such worship was wrong and foolish, that it gave him no happiness while to me it must bring disappointment. I could not listen, and at last I wearied him. He said little about it after awhile, but he went away, and once more my life was desolate. He said he would come back, but he never did. He wrote to me often, kind, tender letters, but they chilled my heart, and then one day he wrote to tell me that it must be all over between us. He told me how he had striven to hold fast by his old love for me, but he could not; the mere effort pained him, the thought of my passionate devotion filled him with dread. He could never return such love, he could never endure to have it lavished upon him; once for all he would give it a death-blow; when his letter reached me he should be married.

"I had another lover then, Janet, and I almost hated him, but before many weeks were over I became his wife. He loved me always, but we quarrelled. I could not pretend to love him, and he grew reckless; our home was miserable, and within a year he died. I was too ill to know what happened for a long time after that. Strange faces passed before me, strange voices spoke kindly words of pity, and once every day it seemed to me that Andrew came and stood by my bed. When at last I woke to reason again, *you* were beside me. Oh, how I loved you! How passionately I loved you! You seemed to me to be all the world, and you saved my life!

"My husband had not left me in poverty, I had no need to work, and I spent my whole life in watching over you. I made no friends, for I cared for none. I forgot the miseries of my father's house; I forgot my quarrels with my husband; I forgot even my love for Andrew, and was scarcely moved when I heard that death had visited his home as well as mine, and that he was indeed desolate, for his wife had died and left him childless. Three happy years passed away almost without a cloud. You grew and throve. Every day seemed to my delighted eyes to give a new charm, a new beauty to my treasure; and then in the midst of my joy you fell ill. Day and night, night and day, I watched by your bed—nay, Janet, give me no thanks; it was selfish love! It was all in vain that doctor and nurse argued with me. I *would* not leave you. It was fever and must run its course, they said. If you should recover, my strength would be needed when you could know and call for me; but I would not listen, and one night as I sat beside you all the room grew dark, and I knew no more. When I recovered I could not rise from my bed, but I implored with passionate tears to be taken to you. Then some one came forward and sat down beside me and took my hand, and I saw that it was Andrew. It gave me no surprise to see him there. I dimly remembered that I had seemed to see him before when I was ill, and for the moment his presence calmed me.

"'Mary,' he said, in his old quiet tone, 'if you do not do as I tell you, you will die; and, what is more, the child will die too.'

"I sprang up with a scream and struggled to go to you. 'My child, my child!' I cried.

"'She is not your child—she is mine,' he said, in that calm tone of truth which had never failed to convince me, and which now pierced like a sword of ice into my heart. 'Yes, she is mine! Listen.' His quiet eyes controlled me, his quiet words subdued me. 'When you were very ill, dying they thought, my name was often on your lips, and they discovered and sent for me. On the same day a child was born to each of us, and my wife and your child died. "We might have hoped for her if her baby had lived," said the doctor; 'and I gave my child to you. Can you not bear what I have borne?'

"Oh, Janet, my child, his words were healing, and the sorrow that from that hour I tried to bear was taken from me!"

At first when mother ceased speaking, the world, and love, and life seemed to me to be blank and hollow, but in a few moments I rose from my seat and kneeled at her knees.
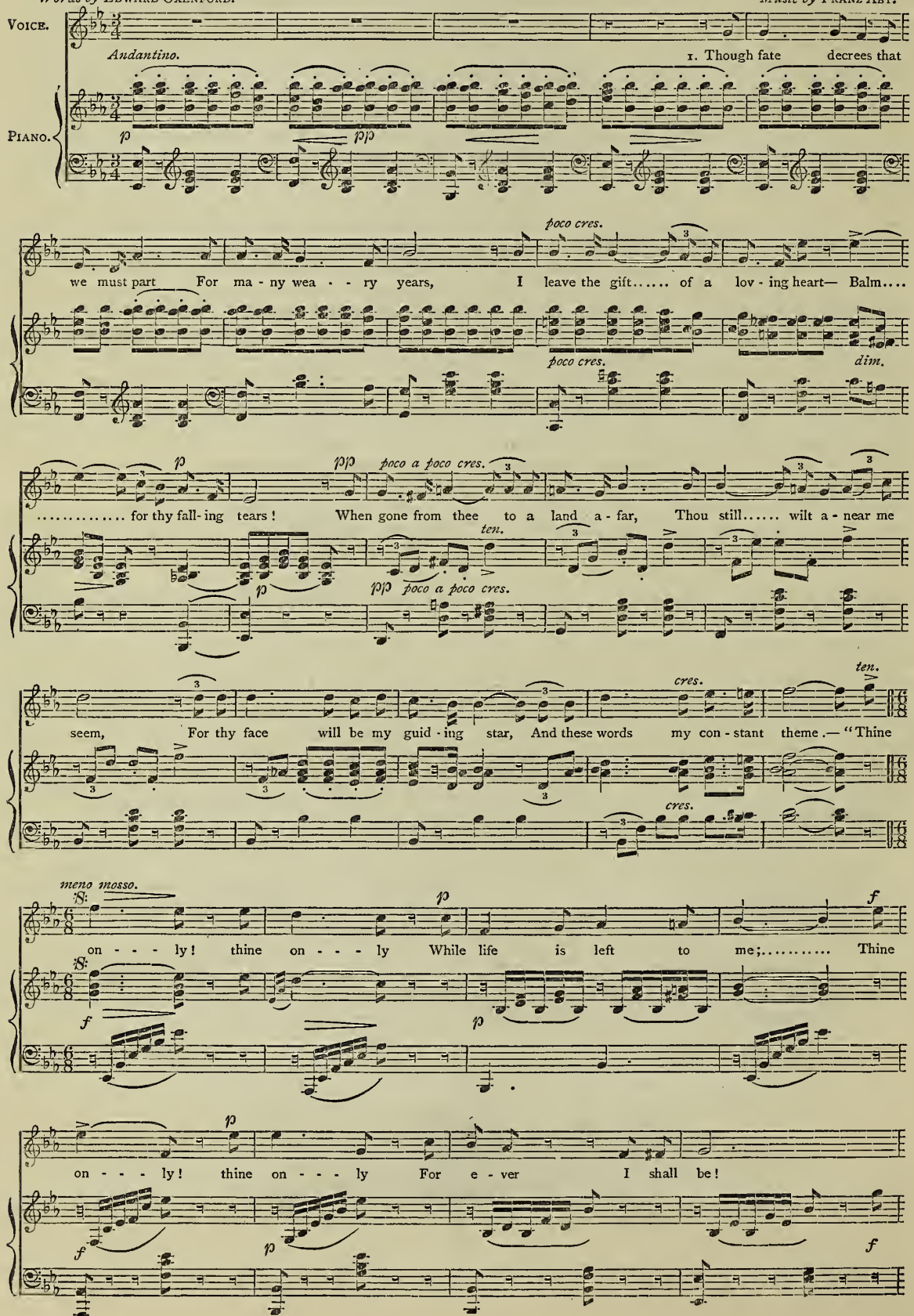
"Oh, mother dear—my father?"

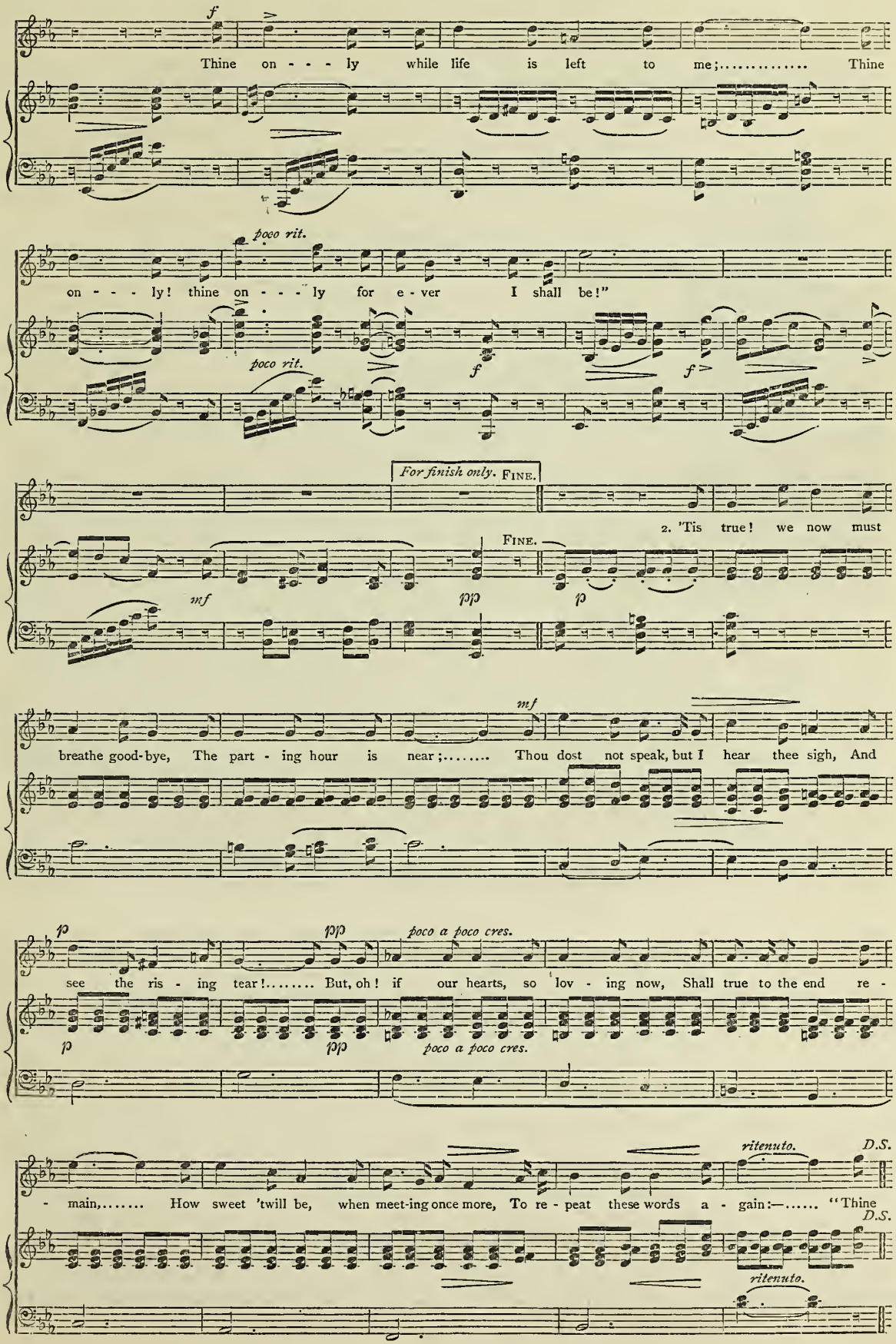
"He died long ago. Janet, do you love me?"

Then, as we kissed each other, I knew that in all our lives of happy love dear mother and I had never been so near together.

The Parting Hour.

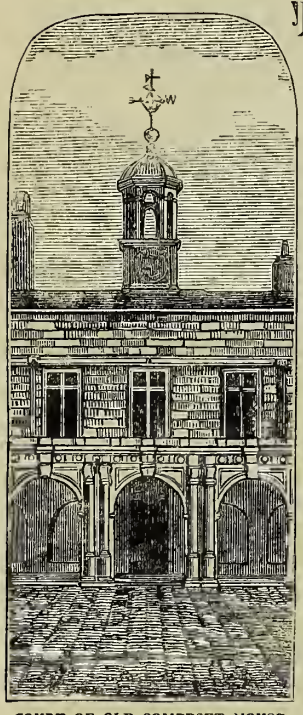
Words by EDWARD OXENFORD. *Music by* FRANZ ABT.




f
Thine on - - - ly while life is left to me;..... Thine
poco rit.
on - - - ly! thine on - - - ly for e - ver I shall be!"
poco rit.
f
f
For finish only. FINE.
2. 'Tis true! we now must
FINE.
mf
pp
p
mf
breathe good-bye, The part - ing hour is near;..... Thou dost not speak, but I hear thee sigh, And
p
pp
poco a poco cres.
see the ris - ing tear!..... But, oh! if our hearts, so lov - ing now, Shall true to the end re -
p
pp
poco a poco cres.
ritenuto.
D.S.
- main,..... How sweet 'twill be, when meet-ing once more, To re - peat these words a - gain:—..... "Thine
D.S.
ritenuto.

OUR LEARNED SOCIETIES.

BY A FELLOW OF THE ROYAL HISTORICAL SOCIETY.



COURT OF OLD SOMERSET HOUSE.

THERE are few persons of the present day who have not some acquaintance with the so-called "Learned Societies," but comparatively few have any very definite idea as to their origin and constitution. Seldom, indeed, is a book now published to the name of the author of which on the title-page some enigmatical letters are not attached, presumably to show that he is a man of some importance in science or in literature, though as a matter of fact there is small honour attaching to membership of many of the numerous associations which have at different times been formed for the promotion of literature, science, and art. Just as the names of these societies are legion, so are their constitution and objects multifarious; but they may nevertheless be divided into two chief groups—the chartered and unchartered societies. The latter are of course far more numerous than the former; there is indeed hardly a town without its "Naturalist's Club" or "Antiquarian and Field Club," or some such association for the promotion of local inquiry, and the encouragement of learning of one kind or another. The chartered societies, on the other hand, are confined almost entirely to the Metropolitan Cities of London, Edinburgh, and Dublin, and are comparatively few in number.

Many of these societies have received most important concessions from various statesmen, who have been applied to in their behalf, and at Burlington House are gathered together the oldest and most distinguished of the societies, for whom accommodation is provided by the country, in return for the benefit conferred upon the community by the scientific labours of their Fellows. Close to the arched entrance from Piccadilly, and next door to the Post-Office, is the Linnean Society, next to which is the Royal Astronomical Society, followed by the Society of Antiquaries. Opposite to this, on the other or east side of the quadrangle, are the rooms of the Royal Society, to which those of the Geological Society are immediately adjoining, the Chemical Society closing the list, and occupying a small corner opposite the Linnean, and having its doors within the entrance archway. Though the other societies of the metropolis are not lodged in sumptuous apartments at the expense of an appreciative country, one at least—the Zoological Society—is materially indebted to direct national support: it holds a large tract of land in the heart of London at a merely nominal rental, for the purpose of accommodating a large and scientific collection of animals, though probably few of the numerous visitors to the Zoological Gardens ever troubled themselves to think how these gardens came to occupy the position they do, or to whose enterprise and knowledge they owe their existence.

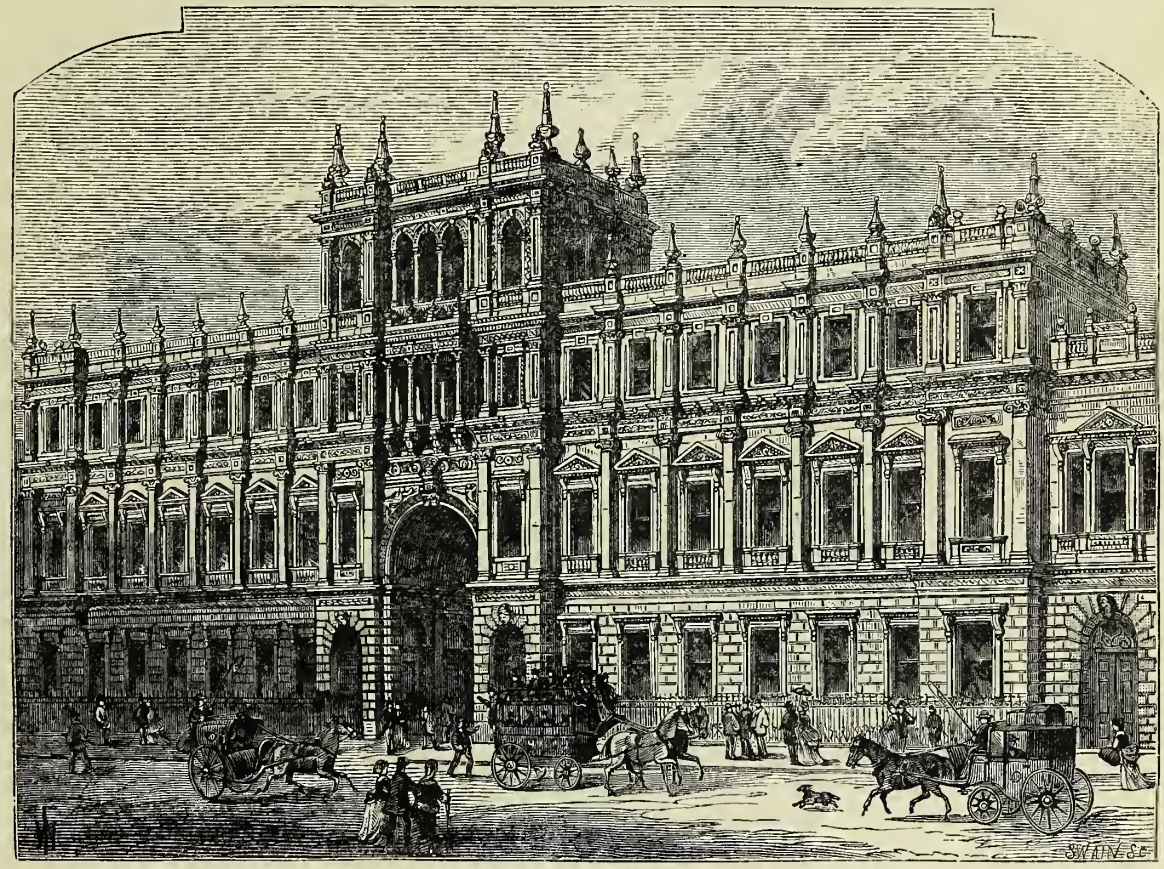
Standing first on the list of the Learned Societies of this country is the Royal Society—pre-eminent alike from its antiquity and from its standing amongst its fellow-institutions. Instituted in 1660, the Royal Society received its first charter in 1662, which was found to be in some degree defective. A second charter was obtained to remedy these defects in 1663, while a third charter was granted to it in 1669. King Charles II. appears, indeed, to have taken no little interest in the early proceedings of the society of which he was the nominal founder, and Evelyn records (21st August, 1662) that he "gave us the armes of England to be borne in a canton in our armes, and sent us a mace of silver gilt of the same fashion and bigness as those carried before his Majesty, to be borne before our President on meeting daies." In 1667 Dr. Sprat, afterwards Bishop of Rochester, published his "elegant History of the Royal Society," as it is called by Evelyn; from which it would appear that even at that early period of its existence there were objections raised amongst "outsiders" to its proceedings, which, says the learned divine, "did make it necessary for me to write of it, not altogether in the way of plain history, but sometimes of an apology." The early promotors appear, indeed, to have anticipated some such troubles as in the early part of the present century called forth Dr. Granville's "History of the Royal Society," which work, unlike Dr. Sprat's, was certainly not written even "sometimes in the way of an apology." At the time of Dr. Sprat's History, and for many years after, the society held a college and lands at Chelsea, which had been granted to them by the Crown. In 1682, however, they sold this property, and eventually removed to apartments in Crane Court, in Fleet Street, where they remained until 1782. In that year the Royal Society removed to apartments in Somerset House; thence some years later they migrated to old Burlington House, and about six years ago finally took possession of the splendid suite of apartments which they now occupy.

The Royal Society is now, perhaps, the only English society the Fellowship of which can generally be taken by itself as evidence of scientific eminence, and the letters F.R.S. after an author's name may almost always be accepted as proof of ability in some branch of science. Candidates for admission to the Royal Society must be

proposed by six Fellows, of whom three at least must certify to his fitness for the honour from their own personal knowledge. The names of all candidates proposed subsequently to the first meeting in March of the preceding year are announced by the Secretary at the first meeting of March of the current year, from a list arranged in alphabetical order.

Subsequently the Council select by ballot not more than, but practically always fifteen from the number of candidates. The names thus selected by the Council are read at the ordinary meeting in May, after which a circular letter is sent to every Fellow of the society, naming the day and hour of the next election, and enclosing an alphabetical list of the selected candidates, leaving space for such alterations in the names as any Fellow may determine to make. The rejection, however, of any candidate selected by the Council is of the rarest occurrence, and indeed is attended with so much difficulty, and requires so much previous organisation, as to be almost impossible. The annual election of Fellows is always fixed for the first Thursday in June. Formerly the subscriptions to the Royal Society were so high that the expense stood in the way of many men of moderate means becoming Fellows, the composition-fee for life-membership having been as much as sixty guineas ; but during the last few years the privilege of compounding has been withdrawn, while the entrance-fee has been abolished, and the subscription reduced to three guineas—a sum within the means of even the poorest of our scientific men.

As its full title implies, the Royal Society was founded for the encouragement of the scientific investigation of every branch of natural knowledge, and accordingly, in the pages of its "Philosophical Transactions" and "Proceedings," elaborate treatises may be found on almost every subject connected with natural philosophy. Physics in all its many branches, Zoology, Botany, Astronomy, Geology, Mineralogy, Chemistry, Physiology, Surgery, and Medicine, all find a place in these records of the labours of the English scientific world, which form a collection of the highest value.



BURLINGTON HOUSE.

Occupying a position and covering a field almost identical with the Royal Society of London is the Royal Society of Edinburgh, which was established under the name of the Philosophical Society of Edinburgh in 1739, and received its first charter of incorporation in 1783. In the early days of its existence this society was, like so many of the Continental societies at present, divided into two sections — the Physical and the Literary ; but it was found that the literary communications were so few in number that the division was abandoned, and the society is now a purely scientific one. The Fellows are distinguished by the letters F.R.S. E. (or Ed.).

As in England and Scotland the two Royal Societies of London and Edinburgh occupy the leading place, so we find established in Dublin the Royal Irish Academy, which was instituted in 1785, and received its charter of incorporation in January of the following year. The scope of this society is wider than that of either of the societies of London or Edinburgh already referred to, and embraces "the study of Science, Polite Literature, and Antiquities," its Council of twenty-one members being equally divided into three committees, each of which has charge of one of these departments. The members use the initials M.R.I.A.

While these societies occupy themselves in the wide field of general philosophy, it was found that students of particular branches of science or art required societies to which they could communicate papers exclusively on their special subjects, and hence arose innumerable "Departmental Societies," as they have been called, each of which occupies itself solely with its own branch of research. Oldest amongst these societies is the Society of Antiquaries, the idea of which is said to have originated with Archbishop Parker, in 1572, and whose earlier meetings were held at the house of Sir Robert Cotton. This society was dissolved by King James I., who appears to have regarded its meetings as political; but, notwithstanding this dissolution, it does not appear to have become altogether extinct. From the year 1707, however, its public revival is dated, and from that to the present time its meetings have been held without interruption, the number of its members being limited in 1717 to a hundred. It was not, however, until 1751 that the society received its charter of incorporation, in which King George II. declared himself its "Founder and Patron," and gave it the name of the "Society of Antiquaries of London." In 1780 King George III. granted to the society the apartments they formerly held in Somerset House, whence they migrated to their present abode in Burlington House some six years ago. As its name implies, the objects of the society are "the study of antiquity, and the history of former times," though formerly these were limited to the elucidation of the history of Great Britain previous to the reign of King James I. Its members are known by the initials F.S.A.

Of the purely Scientific Societies the earliest was the Linnean Society, which was founded in 1788, and received its charter of incorporation in 1802. It was instituted for the "cultivation of natural history in all its branches, and more especially of the natural history of Great Britain and Ireland." It took its name from the famous Swedish naturalist, Carl von Linné, more generally known under the name of Linnæus, and its labours have been devoted to the study of zoology and botany, its published papers on these subjects being of the greatest value. The initials used by the Fellows are F.L.S.

Perhaps next in importance to the Linnean is the Geological Society of London, which was founded in the year 1807, and chartered in 1826. Its object is "the investigation of the mineral structure of the earth;" but the pages of its "Transactions" and "Proceedings" and "Quarterly Journal" contain papers not only on the mineral structure of the earth, but also on the organic remains occurring in the various strata of the earth—a branch of study usually denominated palæontology, and coming as much within the domain of the zoologist and botanist as of the geologist. Its Fellows use the initials F.G.S.

The Royal Astronomical Society was founded, as is shown by its name, for "the encouragement and promotion of astronomy," its foundation dating from the year 1820, though it did not receive its charter of incorporation until 1831. The initials of fellowship are F.R.A.S.

Another of the more important of the London societies, the Chemical Society, was founded in 1841, for the promotion of chemistry and the allied branches of science, its Fellows being known by the initials F.C.S.

The Royal Microscopical Society was instituted in 1839, for the promotion and diffusion of improvements in optical and mechanical construction; for the communication and discussion of observations and discoveries; for the exhibition of new or interesting microscopical objects and preparations: for submitting difficult and obscure microscopical phenomena to the test of various instruments; and for the establishment of a library of standard microscopical works. With such a programme there is hardly a single branch of science (unless it be astronomy) with which some of the members of the Microscopical Society are not occupied; and thus, indeed, it is with nearly all the important societies—their studies, though divided, are yet so dependent one upon another that without the means of co-operation and communication afforded by the meetings of the different societies the progress of science would be slow indeed compared with what it is at present in this country.

Another society highly important as regards its labours and scientific publications is the Zoological Society, which originated in a "Zoological Club" of the Fellows of the Linnean Society. Its Fellows use the letters F.Z.S. And perhaps on a par with the Zoological is the Royal Geographical Society, whose labours and publications are familiar to all. Its fellowship is indicated by the initials F.R.G.S.

For the "advancement of literature" the Royal Society of Literature of the United Kingdom was founded in 1823, and received its royal charter of incorporation in 1826. This society has done an immense amount of the most useful work, particularly with reference to Egyptian, Latin, and Greek literature, whilst its "Biographia Britannica Literaria" deserves special mention. Its members are known by the initials F.R.S.L., or more correctly, M.R.S.L.

The Statistical Society of London, founded in 1834, for the purpose of procuring "exact information on subjects on which only general ideas are entertained," is another highly useful society, the Fellows of which are known by the letters F.S.S.

The Royal Historical Society, too, has already done

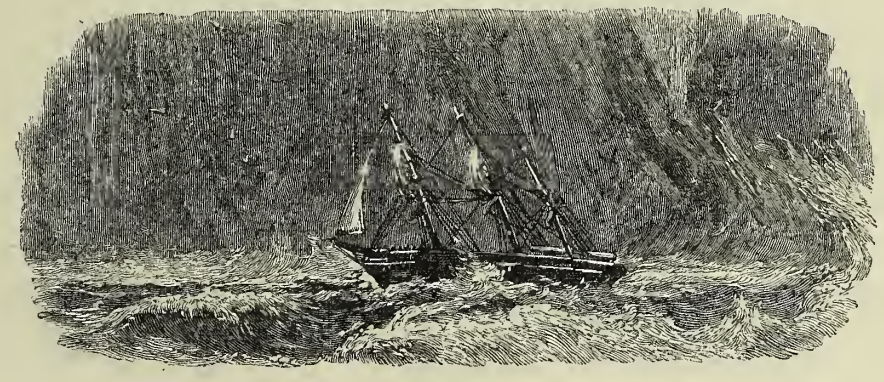
good work in historical research, some of the papers published in its "Transactions" being of high value. After passing through a time of trouble it is now fairly established, and will probably prove itself deserving of the support it receives from the public. Its Fellows are known by the initials F.R.Hist.Soc.

For the study of botany there are the Royal Horticultural, the Royal Botanic, and the Botanical Societies in London, as well as the Botanical Society in Edinburgh, but none of these hold so high a position as the Linnean, Geological, or others of the older scientific bodies, probably owing to the fact that they do not issue any important volumes of transactions.

While the study of insects is so universal, at least amongst the younger members of the present generation, it is curious to find but one important society devoting itself to this branch of science in London—the Entomological Society. It was founded in 1833, and has published a large number of papers on its special subject, many of them of great interest.

The mode of election of Fellows of the Royal Society has already been explained, but the election of members of the lesser societies is far from being so complicated. The candidate must be proposed and seconded by Fellows to whom he is personally known, and other Fellows support the application. He is proposed usually at one meeting, announced for election at the next, and his name submitted for ballot at the third. The number of black balls rejecting a candidate varies considerably, but about two-thirds of those voting being in favour of election usually carry it. In the Royal Historical, and perhaps in some other societies, the election is in the hands of the Council alone, but it generally rests with the members present at general meetings.

It will be seen that every branch of science, as well as, in a lesser degree, both arts and belles-lettres, is represented in England by an association formed specially for the promotion of its study, and that thus every worker may in his own field of labour associate himself with others working in the same cause, and thus at once communicate the results of his own investigations to those most interested in them, and himself obtain the earliest intelligence of the investigations of others. And from this point of view alone should most of these societies be regarded, and not as giving a scientific status to its Fellows, though one or two, such as the "Linnean" and the "Antiquaries," are partial exceptions to this rule, while the Royal Society may fairly be regarded as the "Upper House," into which it is impossible to gain access until hard and intelligent labours in the cause of science have gained for the candidate a reputation for ability of the highest order.



THE SAILOR BOY'S RETURN.

WHO is she with the grief-blanched tresses
Wandering so oft by the murmuring sea?
Her cheeks are pale, but her glance expresses
A hope as constant as hope can be.
When fiercest tempests sweep o'er the ocean,
Wringing her hands while the breakers roar—
In calm and storm with such fond devotion
Watching the ship till it reach the shore.

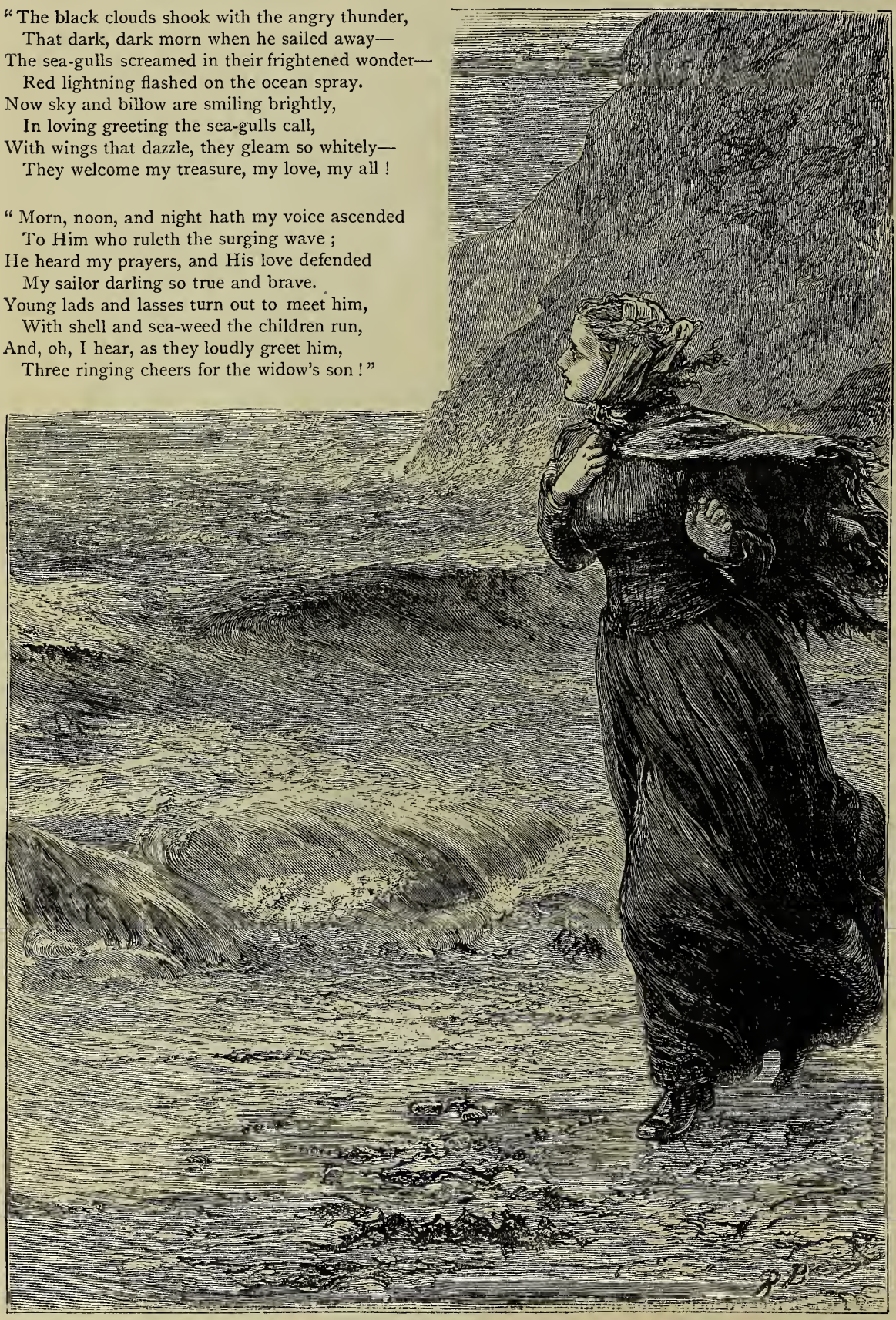
Who is she, that no loving fingers
Have bound her tangle of silvery hair?
Some lonely mother, perhaps, who lingers,
Awaiting the child of her love and care;
For seeing white sails in the distance gleaming,
Her white cheeks glow, and she shrieks with joy—
"He comes! he comes! with his blue eyes beaming,
And bright locks dancing—my darling boy!

"For very gladness the waves are leaping,
The sun is rising to show me now
How fair he looks with the salt breeze sweeping
The yellow locks from his radiant brow—
Ah, blessed sun, to these dim eyes showing
The brightest form on that crowded deck!
Ah, throbbing heart, that beats proudly, knowing
Whose picture hangs round his sun-browned neck!

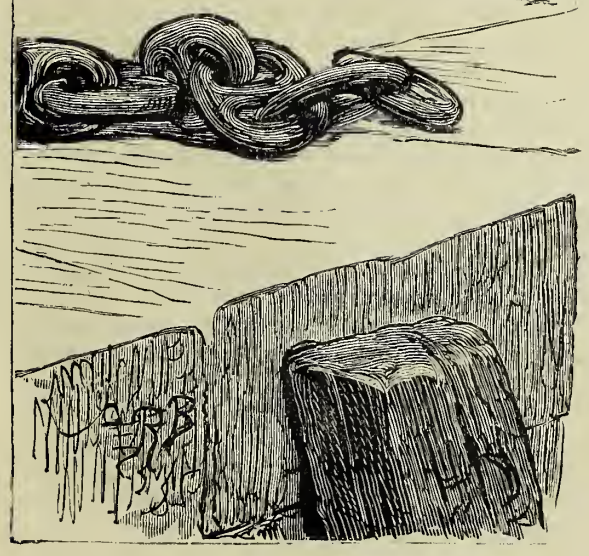
"How long his voyage, how lone, how dreary,
And how my darling must yearn for rest!
So let me haste, for my boy is weary,
And fold him close to my longing breast—
I shall not fear when the nights grow colder,
Though winter tempests blow wild and bleak,
For I shall lean on his strong young shoulder,
And feel his breath on my faded cheek.

"The black clouds shook with the angry thunder,
That dark, dark morn when he sailed away—
The sea-gulls screamed in their frightened wonder—
Red lightning flashed on the ocean spray.
Now sky and billow are smiling brightly,
In loving greeting the sea-gulls call,
With wings that dazzle, they gleam so whitely—
They welcome my treasure, my love, my all!

"Morn, noon, and night hath my voice ascended
To Him who ruleth the surging wave;
He heard my prayers, and His love defended
My sailor darling so true and brave.
Young lads and lasses turn out to meet him,
With shell and sea-weed the children run,
And, oh, I hear, as they loudly greet him,
Three ringing cheers for the widow's son!"







A loved face glows 'neath her fond caresses,
In boyish rapture two blue eyes shine—
"Oh, lovely wrinkles! oh, dear grey tresses!
Oh, sweetest mother! oh, mother mine!"
Whispers a voice, and a brown hand raises
One long tress blanched with the grief of years,
Clasping it close, while he fondly gazes
In eyes now brimming with joyful tears.

More sweet than rain in the summer weather,
That cool and fragrant some pale flower sips,
His kisses fall, as they stand together,
In tender showers on her faded lips—
Warm hands are clinging in loving greeting,
And He who guided the ship to shore
Is smiling down on that happy meeting—
Blest be His mercy for evermore!

FANNY FORRESTER.

THE TROUBLE IT BROUGHT;

OR, THE OLD HOUSE IN THE CHURCHYARD.

By C. E. DESPARD, Author of "The Artist and the Man," &c.

CHAPTER THE FIRST.



HERE have been certain misconceptions about that singular series of events which took place some years ago in connection with the Old House in the Churchyard of our village, which people are beginning to say again, as they maintained then, is haunted. And those events were interesting in themselves, and deserve to be recorded. On both these accounts I think of putting down in black and white my rendering of them; and I may venture to say, without undue boasting, that I am the best person to undertake the task. I was not one of the chief actors in the little drama of real life which I desire to commemorate, undue emotion therefore did not blind me to its dramatic capabilities, and yet I was not a cold onlooker. My sympathies—strong, deep, girlish sympathies—were engaged from first to last, and I was in the position of an observer who has a keen interest in observing correctly; besides, though not a principal agent or sufferer, I may call myself a subordinate character in the little episode I record. Once or twice I am conscious of having, by some action whose result I could not foresee, helped forward or retarded its development.

It is for these reasons that I think I may legitimately call myself a suitable person to fulfil the desire frequently and ardently expressed by our most intimate friends, to circulate among them, that is to say, some written account of the strange story which makes the old house in the churchyard, so long empty and deserted, interesting and remarkable to every member of our family.

It began, for me, with an evening walk, taken by my cousin Nina and myself. The season was late autumn. We had just passed through a period of gloomy and depressing weather; but this day, I remember, was perfection. We had taken advantage of it to pay a visit to a distant farm-house, and so beguiling was the day that we had forgotten the time, and were therefore later than usual on the road.

The sun went down in a great flush of golden glory; we could not hasten while that grand spectacle was before our eyes; but it disappeared below the horizon, and I began to urge on Nina the necessity for a quickened pace. I could not persuade her to see with me, and she had her way as usual. Talking, laughing, stopping now and then to pick a flower, or watch some curious aspect of light or colour in the distance, we went on our way, and before we reached the churchyard, which lay between us and the Rectory, our home, darkness had begun to gather.

I must confess the truth at once, for sooner or later I shall certainly let it escape me—I am, and always was, a little superstitious.

It is difficult entirely to free ourselves from old associations, and I had been cradled in ghost-lore. My mother died when I was an infant. I am the youngest of our family; my father and brothers, though always kind and thoughtful with regard to me, were compelled to leave me during my early years in the hands of servants principally. Our servants, excellent women, and exceedingly trustworthy, were taken from the village, and our village was quite behind the times in its ideas. It even maintained a lingering belief in witches.

Naturally, then, the old village legends were poured into my ear. I heard of haunted houses, of churchyard revels, of strange old women who walked through the village streets on certain nights of the year, with a hundred other stories which I have since forgotten. The consequence was that I became a perfect little coward. I could not bear to be left alone in the dark; strange noises I endowed with an alarming significance; to strange sensations and curious dreams I gave interpretations of my own. I had an invisible world continually surrounding me.

Now, as it happened, the spot where Nina and I were standing had an evil reputation.

I should explain that we had halted—I involuntarily, and she of her own accord—close to the stile which, on this side, separated the churchyard from the road. An ancient yew threw its shadow over this stile, and it was dark near it even at full noon-tide, but when over the rest of the world transparent twilight reigned, the darkness here was such as might be felt.

The yew was not, however, planted in the churchyard, though its roots must have run under some of the graves. It filled a place close to the wall which bounded the churchyard to the right, and enclosed an ancient garden surrounding a long-deserted and very much haunted house, which went by the name of the Old House in the Churchyard. Once upon a time, I believe, it had been the Rectory; but when, some sixty or seventy years before, a new Rectory had been built, the old one, with the ground upon which it stood, was bought from the parish by a rich Jew. About this Jew curious stories went abroad. After having inhabited the house about twenty years—he was so old then, they say, as to look scarcely human—he died, and no one had lived in it since.

My father told tales about how he and his step-sister, our Nina's mother, to whom he had been devotedly attached, had loved the Old House and garden, how they had peopled them, not with ghosts, but with beautiful creatures of the imagination, and played many a merry game in the empty rooms and quaint old summer-houses. We of our generation had too much dread of the place to turn it into a playground. For me the shadow of that black yew-tree was enough. I always stepped over the stile which stood under it with ungraceful haste.

Yet here Nina chose to pause, and at the very hour too when darkness was gathering.

"Come," I said, "make haste, it is getting late."

"Does that matter?" she answered. "Look, Mary, do you see the moon rising behind the Old House? I delight in that house. I shall find my way into it some day."

"Yes, if you like; but just now——"

"Now would be the very time. Between the lights, when the dusty nooks and corners are hidden, and everything looks mysterious."

"Jump down, Nina," I cried; she had taken up her stand on the stile, preventing me from crossing it.

"My dear," she answered sweetly, "I can make room for you, if you are tired of standing."

I must confess my cowardice. It was really very black under the yew. I had begun to tremble from head to foot. I might, of course, have jumped over the stile and left Nina. That I could not do. If there were anything to be faced, I would not allow her to face it alone, for I loved my new-found cousin, who was gentle, beautiful, and, in spite of her wilfulness and pride, as dependent upon me as a child upon its mother, with almost more than the love of a sister.

"If you will persist in staying, I must stay," I said. I found it a little difficult to pronounce my words properly for the chattering of my teeth. "But I wish you would come. Nina, *do* come; surely you have been here long enough."

Her clear, silvery laugh rang out upon the night-air.

"I believe you are afraid," she said; and then she alarmed me by becoming grave suddenly. "Mary," she said, in an intense whisper, "I wish I could believe in ghosts as you do."

I caught her by the arm. "Let us talk of it at home," I said. "Come."

But she wrenched herself from my grasp. She said, "It is easier to talk of such things here. In the lamplight or the sun-light, with people about us, it seems sacrilegious; but now, under this old tree, which has seen so much—so much—and with that old house before us, one can really imagine the spirits coming. My mother loved this house. She told me about it long ago. I sometimes fancy——"

We were interrupted. I had been hearing imaginary noises for the last few moments, each more strange and unearthly than its predecessor. I heard a real sound now, a prolonged cry.

We both held our breath. Nina leapt to her feet, and stood listening, her head bent, her eyes wide with fear or wonder. It came again; it proceeded from the Old House.

I knew what it meant now, and I shuddered. The legend went that the old Jew who, so many years ago, lived here, had walled up alive a beautiful musician, said by some to be his daughter, because she refused to marry according to his will; and that, on certain evenings of the year, her voice was heard uttering a melodious wail. I had professed to disbelieve the story, and this evidence of its reality froze the very marrow in my bones.

"You hear?" I said to Nina.

And she answered in a low, deeply-stirred voice, "Yes, I hear."

"Then, come home," I cried, clutching her arm, and with all my force trying to drag her homewards.

But once more she threw me off.

I could not understand her. As a general rule, in our little scuffles, I, who was robust and muscular, won an easy victory. To-night she seemed endowed with a new strength. No power of mine could move her. I thought I would try what frightening her might do. "If you will not come at once," I said, "this instant—I will leave you here alone."

To me no threat could have been more terrible. I expected Nina's immediate compliance. To my horror and dismay she answered with a petulance as novel as her strength—"Go, go at once. I wish you would. I want to be left alone here."

As she spoke she crept close to the old wall, and laid her head against it lovingly. And again we heard the sound—a wail intensely prolonged—soft, musical, plaintive: no human voice could have given it utterance—no human soul could have endured the anguish of which it seemed to tell.

I felt my heart within me beating tumultuously. The sense of fear was almost drowned in the sense of compassion. I covered my face with my hands, and sobbed. Alas, poor ghost! What was its fate? How great must the sufferings be that caused it in the silent night to pour out its complaints! Alas, poor ghost! And it was all true then, all true that I had heard, that till now I had scarcely believed—true that tormented spirits walked the earth—true that there were some sins no heaping up of the dust of centuries could cover—true—but it was horrible all the same—horrible! It brought awful thoughts to my mind. There seemed to be a subversal of the ordinary course of things, and it made my brain reel to think of it. I could not stir, scarcely could I breathe. I was under the spell of a dread fascination, listening for the sound, and yet shrinking with sick horror from the idea of hearing it again. And, underlying all this fear and misery, was a penetrating conviction of the fact that something must be done. I could not remain all night in the neighbourhood of the graves and under the walls of the haunted house, and I could not leave my cousin alone there; but neither threats, nor entreaties, nor force seemed to have any effect upon her. What was to be done?

The question was settled presently, as most such questions are, unexpectedly. While I stood trembling and awe-struck by the wall, Nina made a sudden

spring past me. I followed her, but she was swift of foot; besides my fear had made me weak; all my limbs were trembling. "Go back!" I heard her cry out; "if you love me, do not follow me."

And then distance swallowed her voice, and the evening darkness hid her. I was alone in the churchyard.

Well do I remember the sensations of that moment. At first I was too horror-struck to act. I stood silent; then love for Nina, and pity for the poor ghost, conquered my slavish fear. I made up mind to follow my cousin. Unfortunately, however, heroic determination was all too late in the field. Nina had vanished.

I am surprised when I call to mind my own courage that night. I went round the old garden-walls, feeling them as I went; I glanced fearfully under every shrub and tree; I even plucked up heart to stand for a few moments before the large, heavily-rusted iron gates, and peer into the dark shrubbery. But all was of no use. I tried the gate, and, in spite of my anxiety to find Nina, it relieved me to discover that it would not yield. Since she could never have had the strength to scale gate or walls, I became convinced now that appearances had deceived me. My cousin had run away from, and not towards, the haunted house. Naturally then she had run home: I should find her there before me.

Thus convinced, I had no further hesitation in giving way to my own inclination. With a speed impossible to render I ran away from the dismal churchyard, and many minutes had not passed before I stood, breathless and panting, at our own garden-gate.

CHAPTER THE SECOND.

I HAD three brothers—Henry, Eugene, and James. The eldest was considered by all the world, himself included, to be a very clever fellow indeed. He was a scholar, a man of business, and a philosopher. James, the youngest, though not so talented as Henry, was eminently shrewd and sagacious. The world—our little world—said he would go further than many a cleverer man; and the fact was that he formed so just an estimate of himself and his capabilities as never to undertake a task that he could not carry through successfully.

Eugene, my second brother, was neither talented nor worldly-wise. I give now, not my own opinion, or, I think, my father's, but that of the world in general, which had already written down Eugene as a dreamy enthusiast, whose chief business in life would be doing foolish things.

Each of these three had passed a different judgment upon the beautiful foreign-bred cousin whom, some months before, our father had brought home to us.

Henry said she was as beautiful as a Greek statue, but as inanimate. He spent many hours in studying her face. Afterwards he sent an article to one of the leading periodicals on "The Probable Sources of the Power of Beauty."

James thought her handsome, but observed that she was reticent, and stated that he could not quite make her out. Experience, he said, had led him to the conclusion that reticent people should be well known before they are trusted. He warned me not to be too intimate with Nina. I might very possibly, he said, be disappointed in the long run.

I answered indignantly that I was not afraid of disappointment; but even if I were it would be mean, in the opening of a relationship, to debate over what its effect upon myself might be.

James answered me with one of his sagacious smiles—these smiles have always had an irritating effect upon me—and I put him down as deficient in enthusiasm.

Eugene passed no judgment upon Nina; but she had not been one month in the house before I saw that she was and always would be, to him, the one woman out of all the world, his heroine and his queen.

It was natural, then, that in the perplexity of that evening I should at once think of Eugene. If I could only succeed, I thought, in gaining his attention before I had been seen by the others, all would be well.

Fortune favoured me. Eugene was leaning over the garden-gate, looking out for us. My breathless inquiry, "Has Nina come in yet?" and his exclamation of surprise at seeing me alone, were made almost simultaneously. In as few words as possible I told our adventure, and as I proceeded the uneasiness in his face abated.

"Only a ghost!" he said finally. "Ghosts can't do much mischief, but I wish you had been courageous enough to stay by Nina."

I justified myself by explaining how I had followed her; and while we were still speaking, we went together in the direction of the Old House—I clinging like a child to Eugene's hand.

It was dark now, but we had not gone far before we heard the welcome sound of a voice singing in the silence.

Eugene grasped my arm, and we stopped walking. I knew what he wished. This voice, which was Nina's, was sweeter to him than anything upon earth, and I did not move, I scarcely ventured so much as to breathe, until, the melody having run its allotted course, it was followed by a deep sigh.

At this, Eugene drew me on, and we saw Nina's slight figure advancing through the half-darkness. She did not see us, her head as she walked was turned back towards the Old House. One might have imagined she was leaving it with regret.

I called her by her name, and she turned round, starting violently, then appearing to recover her composure with effort, "Oh, it is you, Mary," she said. "Thank you for coming for me, but it was quite unnecessary. I have been long accustomed to take care of myself."

"But tell me——" I began, for I was full of eager curiosity.

"All a disappointment, no ghost, not a vestige of anything supernatural."

I wondered if I only suspected that her light tone of voice and manner were forced.

"But the sound must have meant something," I said.

"What sound?"

"Why, the shriek that frightened us both."

"Shriek! I heard no shriek."

"You see, Mary," said Eugene.

I was indignant with Nina for deserting me in so cruel a manner. My credulity and imaginative tendencies would make me, I knew, for the next few days the family butt. And I was certain I had heard the sound. I was certain Nina had heard it too.

"Don't, Nina, don't," I murmured.

But she continued to talk in the same strain. Eugene, however, changed the subject by remarking, as he drew her hand through his arm, that she must be very tired; she was trembling.

It was a simple remark, but it seemed to affect Nina singularly. She drew herself away from Eugene.

"You are mistaken," she said coldly; "I am not in the least tired. Thank you, I can walk alone. Pray leave me to myself."

"Certainly, if you wish it," he answered. "But you will allow me to walk near you?"



"SHE HAD TAKEN UP HER STAND ON THE STILE" (*p.* 35).

"I should like to know, then, what made you run?" I said.

"A sudden access of curiosity, dear. If you remember, we had been talking about the Old House. I wanted to see what was inside the gate. And, by-the-by, now I have found my way there, you must not be surprised if you lose me sometimes. It is the most charming place in the world, especially just at this hour. I became quite imaginative as I sat upon the old terrace. I could fancy that, if I went there constantly, some night the dear ghosts might come. Why do you shiver, Mary? I am not afraid of you: is there any reason why I should be afraid of you if you visited me as a ghost? The self would be the same, it would only be the difference of dress—flesh and blood and bones."

"Unfortunately I am not able to disallow anything," she answered petulantly.

He answered not a word, and an awkward silence followed. Then, being sorry for Eugene, I tried to make peace with Nina. I took her hand in mine. The hand was perfectly cold, but, warned by the way in which she had met Eugene's remarks, I made no comment upon this. "If we did not love you, darling," I said, "we should not care as we do for your comings and goings. You are our sister."

"If I am your sister," she said, "you should trust me."

This little speech, intended to be conciliatory, was addressed rather to Eugene than to me. He answered it—

"We do trust you, Nina, entirely."

"I am sure you do," she said—she had now taken of her own accord the arm she had rejected before—"but things might happen," she went on in a broken voice. "People talk in your village. They might say——" Then all at once she interrupted herself. "I am talking nonsense," she cried out. "I am a baby. One might imagine I had seen Mary's ghost. Don't take any notice of what I say."

"Mary's ghost!" I echoed indignantly, but neither of my companions heard my remark. We were now close to our garden-gate, and Nina and Eugene stood under the full light of one of the lamps. Since they chose to ignore me, I took the liberty of observing them. And this observation—I love them both so dearly—had the effect of removing my irritation at once, and sending me off in one of my dream-journeys which I often take when I think of those I love. Eugene was looking down. He is head and shoulders taller than Nina, though she is no insignificant height. In my foolish sister's heart I have always been glad that Eugene is tall. It makes me indignant for people to call him a dreamer; if they called him a "little dreamer" it would make me wild. But, as I said, he was looking down, and Nina was looking up. There was in his face an expression of full contentment such as I had seldom seen there, and, in my own way, I interpreted it.

"What does it matter that our Nina is mysterious?" I seemed to hear my brother say; "that she begins a sentence and breaks it off; that she is not this evening as she has been before? What does it matter? what does anything matter while her lovely eyes are raised to mine, while her hand is on my arm, while her face, calm in the serenity of truth and innocence, looks trustfully into mine?"

Thus I interpreted Eugene, and after my interpretation Nina's words, strange as they were under the circumstances (for why should she be so suddenly frantic-stricken about our confidence?) yet fell naturally.

"Take pity on my childishness, Eugene," she said earnestly. "Promise me that, whatever other people do, you will trust in me."

"Trust in you!" he murmured under his breath.

"But, Eugene, I am speaking seriously. You are better and wiser than any one I know."

I could have taken Nina in my arms at that moment and covered her with kisses. It was beautiful of her to believe in Eugene; it was beautiful of her to speak out frankly the thoughts of her heart. Those words of hers would give him spiritual wings; they would be a light in his darkness; they would quicken his poetic fancy, which I sometimes thought, in the chill of the ridicule of others, and their constant misunderstanding, had begun to wax faint.

Meanwhile Nina went on softly—"And I believe in your promises, Eugene. Will you promise, whatever may happen in the future, to trust in my honesty and uprightness of intention?"

Her honesty and uprightness of intention! What could she mean? Fortunately Eugene was not so inquisitive as I. He saw our cousin was in earnest, and he answered seriously—

"You ask me an easy thing, Nina. Yes, I promise; I could not distrust you if I would."

She said, "Thank you; I shall not forget your promise, and you must not;" and with those words she left us, and went on swiftly into the house.

CHAPTER THE THIRD.

IT may be as well here to give a rapid sketch of our position at the time my little record opens. My father was, and had been for many years, rector of a little village not many miles from London. He had four children, of whom I, the only girl, was the youngest. Our mother had died shortly after my birth. I am sure it is not necessary for me to say that I have the warmest affection and most fervent regard for my dear father. During my childhood I adored him; I thought him absolutely perfect. If, in these later days, I have discovered that he has one weakness, it makes my love and regard no less strong, and, in fact, it is so trivial a thing that I only mention it on account of its bearing on the events I have taken upon myself to commemorate.

My father was a student: he lived much amongst his books. He was a writer as well as a teacher, and I am told, by those who profess to understand these matters, that his knowledge of human nature in all its workings was marvellously true and profound. "He can dissect a heart," I have heard it said, "with as much ease as a skilful surgeon can dissect a body."

I know that, in his sermons, he had a wonderful knack of finding out the weak places in the armour of human souls. I know, and not from my own experience alone, how his winged words often penetrated hearts, and found an everlasting habitation there. I have seen his eloquence, quiet as it was, responded to by flowing tears, and, what is better, good resolves, that showed themselves powerful to endure. Yes, all this I know, and it seems to me the more strange that he should not have been a little stronger than he was with his immediate friends and neighbours.

Clever as he was in other ways—and they tell me he could be even stern in his public capacity—my father lacked the power, so useful in private life, of being able to put people down. I am told my mother possessed it in a remarkable degree. After her death my father's social amiability laid us open to many annoyances.

Our village was small, and the people of any standing were neither many in number, nor overburdened with occupation. Naturally gossip was rampant. People had nothing to do but to observe one another, and repeat to one another the results of their observations. We had neighbours, indeed, of whom I can truly say that they lived for nothing else. There were old Colonel Green and his wife, who lived in a lovely cottage on the borders of the common. It was known as a certain fact that the colonel took his rounds every afternoon, calling, quizzing, examining

the affairs of his neighbours. Of course every day did not bring a new occurrence, but where a novelty was even so much as hinted at, how happy a man was the old colonel, with what a radiant face he travelled home, how many hours he spent in close conclave with his wife, looking at the novelty from every side, discussing, wondering, planning, and prophesying! All this is matter of history. But I did not so much object to the colonel. Though he made terrible mischief sometimes, he was good-natured and did not mean mischief. We had another gossip, however, towards whom my feelings were much more pronounced.

Her name was Miss Ashley. She was elderly, but not old. For years she had taken great care of her health, lived in comparative retirement, avoided all exciting occupations, and strictly prohibited herself from fretting about anything; the consequence was that she was a well-preserved woman, large, fair, and comely. She had a comfortable house, a good income, a large supply of handsome dresses, invaluable servants, and a perpetual balance at her bankers'. And the consciousness of all these points of superiority Miss Ashley carried about with her writ in letters large enough for the most unobservant to read.

Human nature is not amiable enough, I am afraid, to rejoice enormously over a prosperity too perpetually prominent. I really believe it was Miss Ashley's extraordinary comfort and placid self-gratulation which first made me shrink from her. But as I grew up there were other reasons for this feeling. Miss Ashley was a gossip and, unfortunately, not a good-natured gossip. Colonel Green had some dramatic taste. He delighted in anything which promised the spectacle of a new development of character or incidents freshly grouped. Miss Ashley liked to add point and flavour to her own consciousness of superiority by observing that, as usual, people had been doing foolish things. "If I had only been in their place," was a phrase very constantly on her lips, as preamble to some critical reflection on the conduct of her neighbours.

I give these two as samples merely, for they were not the only members of my father's congregation who loved to talk.

We occupied a central position and, unavoidably, a prominent one. My father was a widower; we were motherless. It was therefore, I suppose, natural that our family affairs, our domestic arrangements, the method used to educate and train us, the children, the method in which we showed our gratitude to our father, first for being our father, and secondly for having kindly consented to be so remarkable a man, and to surround himself with such remarkable neighbours, our plans, our hopes, our fears, and destinies should be the common property of the neighbourhood. In any case, so it was; and I, the youngest, and the only girl—"a poor little soul that never knew its mother," I often heard myself called in my early childhood—was specially singled out for the watchful care of my neighbours. My father would not send me to school. He was often reasoned with about the matter, but he stood firm. We were compelled then to have governesses. Those poor governesses! not for the world would I have been in their place. They were watched, advised, lectured, warned. Nothing they did was perfectly right. If they were young there could be no doubt that they had designs upon my brothers; if advanced in years, they were neither too old nor too plain to set their caps at my father. Then they worked me too hard, or they did not work me enough. Mary was growing up a dunce, or Mary was turning into a blue-stocking. When the last, a lady for whom I felt a sincere regard, was dismissed, shortly after a conversation between my father and Miss Ashley, I earnestly entreated that no new governess might be engaged.

My father granted my wish. Probably he also was tired of continually seeing new faces at his table. I was permitted to prosecute my studies alone. My father directed my reading; Henry gave an hour in the evening to teaching me Latin and Greek; James endeavoured to instil into me so much knowledge of men and manners as it is right and proper for girls to be provided with; Eugene introduced me to the world of poetry, and opened my eyes to see wonderful things in the earth and heavens; and an ancient gentleman of the village who had a history in his pallid face, and who carried about in his sunken eyes the ashes of a spent enthusiasm—ashes which, on rare occasions, showed the quick kindling of a life not yet extinct—taught me to sing and to play, and to talk French. He was a Frenchman, and the rumour had long since gone abroad that it was impossible for him to return to his native country; that in his early manhood he had committed some terrible political crime, which doomed him to a life of obscurity and exile. Some of our friends, Miss Ashley amongst their number, thought my father wrong in allowing the friendship—it amounted to that—between me and my old music-master. But here, again, he was firm. Whatever Mr. Dubois might have been in the days that were gone, what he was now was evident to all. The high soul and noble heart of an honourable gentleman shone through the shrunken, withered husk of the broken man.

"He can do no harm to Mary," my father said, "and she may do good to him."

So the old French teacher, my first hero, became almost a member of our family, and from him I learnt my love, not of music alone, but of all that is harmonious in movement and action.

When the event happened which so entirely changed the current of my life, this state of things had been going on for some time.

As regarded the other members of the family, Henry was reading in a barrister's chambers, and went to town daily—our village was only about twenty miles from London; James was articled to a solicitor; and Eugene had not yet chosen a profession.

The event to which I allude was the arrival of our cousin Nina. We were not unaware of Nina's existence. There was in my father's study, hanging op-

posite to his table, the picture of a beautiful lady. Often, during my childhood, he showed me this picture: he told me it was that of his step-sister, whom, before he was married to our mother, he had loved more than anything upon earth. He would tell me, looking up with tender eyes at the lovely face, how he and she had lived together, playing, talking, working, having one mind about all things, never a cloud crossing the heaven of their affection, till the sad day when they were separated. And I knew from the pain in my father's face that there was something sadder even than the separation in his retrospect. But he would shake off the sadness.

when, with a look in his face which was terrible, which made me weep as I had never wept before, our father said to us, "Your aunt Laura is dead."

That was all; it seemed as if he could not say more.

We were dressed in black, and a tablet was put up in the church, which I read Sunday after Sunday; and I longed to ask my father if my cousin still lived, and where she was, and if we should ever see her now; but I dared not for that look in his face.

And so again the weeks and months slipped by, and, though I did not forget Nina, the desire to speak about her died down.



"'HUSH! HUSH!' SHE SAID, 'MY DEAR CHILD'" (*p.* 42).

"I have not seen her again," he would say; "but there is no reason why I should not. She has a little girl, Mary, about your age. I am trying to persuade them to pay us a visit. You would be pleased?"

"Oh, yes, I should be pleased." That was a poor word to express my feelings. When I left my father my heart was always full of my beautiful aunt, and the little cousin, the girl-companion of my own age. I repeated, in anticipation, my father's experience. Nina and I would be all in all one to the other, even as he and his sister had been.

But days passed into months, months into years, and my dream was not realised. My father, though he looked as much as ever at the picture in his study, left off speaking to me about my aunt. Then at last came the sad morning, always to be remembered,

But one day—it was about eight months before that evening walk which forms a landing-place for my memories—my father came into the school-room, where, all alone, I was working at my Greek for Henry. He made some remarks about my solitude, asked if I never felt lonely, and said smilingly that I must not let my brothers kill me with hard work; young girls should have recreation.

It was a rare thing for my father to seek me out in the morning, for at that time he was generally deep in his books. I believed he had a purpose in speaking to me, and I was scarcely surprised when he asked if I would not like a girl-companion of my own age to study with me.

Naturally my thoughts flew at once to my cousin, and, full of excitement, I asked if he had heard from

her, if she was coming to pay us the long-promised visit; whereat my father showed some surprise. Had I remembered all this time, he said, the stories he told me so long ago?

And when I told him that I never could forget them, that Nina, my unknown cousin, the child of my beautiful aunt, whom he had loved so much, was to me the much-wished-for, the often-thought-of, was to me the subject of many a dream, the heroine of many a romantic tale, when I said that the chief desire of my life was to see and know her, when—for once a tongue of the age which mine boasted at that period is set loose it is apt to run far—when I went on to expatiate upon all I would do for her, how I would love her, attend upon her, make her forget her troubles, make her love us so that she would never wish to leave us again, if only I could once have her, have her in the house, have her near me, my father took me in his arms and kissed me.

He was not wont to use terms of endearment, and they had a special value from his lips. Upon this occasion he called me his child, his darling, and blessed me for my loving heart and affectionate tenacity of memory.

"I have been a coward, Mary," he said; "I feared to speak to you of your cousin. I was afraid I might break down. You see I have had sad and anxious thoughts about her. I could not communicate those to you: you would not have understood them; and now when I heard that she wanted a home, which means, of course, that she will come to us, I began to reproach myself. I might, I thought, have accustomed you to the idea of this change, I might have spoken to you about your consin, and taught you to love her; for, as it is, I could not have been surprised if you had shrunk from my proposal of bringing to our home, for good, one who is a complete stranger to you."

"And all that proves," I said, "that you did not know me, my dear father. Nina is not at all a stranger to me, and the idea of seeing her makes me nearly wild with delight. When will she come?"

He mentioned the day. It was not very distant. He told me further that Nina's father had died during an absence from home. "The poor child, I hear, adored him," my father added; "we must not be surprised if she is a little melancholy at first."

Little more passed between my father and me upon that occasion. He returned to his study. I began to occupy myself immediately with setting apart and fitting up in the best taste a room for my unknown cousin.

Muslin and ribbons, pictures and pottery, were brought into requisition. My father bought me new furniture, pretty and bright. Nina's room, looking out on the orchard, and the fields and common beyond, was, I flattered myself, a perfect little Paradise, and in it I now spent the greater part of my time.

I was there one afternoon, turning over the leaves of the books I had brought up, a miscellaneous collection put together with the greatest care and judgment, to arrange in her book-shelves, dipping here and there, as a lover of books is apt to do idly when called upon to meddle with them.

I was told that Miss Ashley was in the drawing-room, and wished to see me. I felt tempted to excuse myself, and indeed only the conviction that if I failed her she would ask for my father, and worry him probably about some parish matter, induced me to overcome my disinclination to see her.

I went down-stairs. There, to my profound irritation, I discovered that my heroic determination had been fruitlessly made.

"I have just seen your father," said our friend. "I am afraid I vexed him a little. There is no need for you to look so indignant, my dear. There are some things which ought not be left unsaid, even though they give us pain. Do you think"—in a raised key; I suppose I did not yet look perfectly calm—"that it is a pleasure to *me* to give people unpalatable advice?"

I might have answered in a way that would have surprised Miss Ashley. She was my father's friend, and I was bound to treat her with respect.

I said coldly, "Oh! of course not."

"Of course not," she echoed. "I am sure I sometimes think I will give up advising people. At best the office is an ungrateful one."

"If she only would!" I thought: but that was too much to hope for. I made some commonplace remark about advice.

She went on, in the tone still of one "wounded in the house of her friends." "And, as it happens, it is of you I have been thinking, Mary. It was on your behalf I advised your father."

This was worse and worse. I was driven to say, with flashing eyes, that "my father was quite capable of judging what was best for me, and even if not, I had rather a thousand times abide by his judgment than have him troubled with advice concerning me."

Miss Ashley's raised brows and shrugged shoulders, which answered my indignation, made me feel that I had spoken foolishly. In her eyes I was only "showing a little temper." This was Miss Ashley's ordinary phrase for describing the restiveness sometimes displayed by the untutored under her gentle discipline.

"Don't be absurd, my dear child," she said quietly, "you are not a baby now. It is time you should leave childish things behind you. Your position, as head of your father's house, calls upon you to be reasonable and thoughtful. You ought to be instructed about the position of your family. You ought to study the character of its different members. For instance, you have great influence with your brother Eugene. Why don't you stimulate him? Arouse his ambition. Let him see that you can only feel contempt for an idler, that all women must."

"If you have come to speak about Eugene——" I began. She stopped me.

"I have not. I know your infatuation, and your poor father's, which is far more serious; you know my views. No; I want to speak to you about another matter. I hear your father intends to take a new inmate into his house——"

I literally bounded on my seat.

"And you have been advising him against it?"

Miss Ashley smiled, and with a grand backward sweep of her hand, "Hush! hush!" she said. "My dear child, my dear little Mary, if you only knew how childish this impulsiveness of yours is—this rushing to conclusions! Can't you be calm for a few moments? can't you wait till I have spoken?"

I coloured, and my head drooped. I felt I had been ridiculous.

"Far be it from me," went on Miss Ashley superbly, "to use my influence against generous and noble deeds. Your father wishes to adopt this poor orphan"—I suppose I am ultra-sensitive; I did not like these words "poor orphan," as applied to our Nina—"let him do as he desires," she proceeded," with another magnificent wave of the hand, "only," emphatically, "let the thing be entered upon wisely; let every one concerned have their eyes open; count the cost; let there be no concealments, no slightest occasion for future recriminations."

Generally a puzzle to me, Miss Ashley was that day more puzzling than ever, but warned by previous defeats I guarded myself from indignant excitement.

"I don't know what you mean by concealments," I said wearily, "and as to recriminations, who is to recriminate? and what are they to recriminate about?"

"Mary, my dear child," said Miss Ashley, "your simplicity is adorable, your father should be proud of possessing your confidence so entirely. But that is all the more reason that you should not be put upon. Tell me now frankly—as between woman and woman—do you know anything about your cousin?"

"I know that she is the daughter of my father's dead sister."

"Nothing more?"

"What more is necessary?"

"My sweet little innocent! your cousin had a father."

"Her father is dead."

"But who and what was he?"

"He was a good man or my aunt would not have loved him."

"Mary, you are too fond of platitudes; it is absurd besides to answer a question of fact with a statement of feeling. I ask you—I have your father's permission—have you heard anything about your cousin's father—his position, I mean—his social status—his manner of life?"

"No."

"Your father, I know, has told you nothing; no one else has done so?"

"I never speak to any one about my family."

"*Your* family! There you are, running away with an idea again. Your aunt's husband was *not* a member of your family. However, 'thereby hangs a tale.' I have not time to tell it now, but——"

"I do not wish to hear it," I said hotly. "If my father wished me to know it he would have told me."

But Miss Ashley only continued to smile in her superior way. "What a hot-headed child it is!" she said, tapping me lightly on the cheek. "Know, my little Dame Quixote, that your father wishes me to tell you the whole story. He agrees with me that you ought to know it, but he feels unequal to the effort of telling it to you himself."

For the first time in my life I felt angry with my dear father. After all that had passed between us there was surely no necessity to employ another to tell me what was in his heart. But also I felt that further resistance to Miss Ashley's will was in vain. She asked for my company at her after-dinner tea that evening. I accepted the invitation knowing that I was to hear the story. If I had known then, as I know now, what arguments she used to persuade my father, I would have acted very differently. But as James said—he says the same still with far less reason—I was young; I did not know the world.

END OF CHAPTER THE THIRD.

HOW TO ENTERTAIN AT CHRISTMAS.

CHRISTMAS gatherings, if not entirely confined to the family, are as a rule mainly composed of relatives, possibly of all ages. I know one happy home where four generations have assembled for the last three Christmas Days.

Unfortunately, family parties do not inevitably mean concord, though they ought to do so. There are always some lonely people whom it is a charity to include in the invitations; and while conferring a kindness, a hostess may possibly by their presence be tending to preserve the general harmony.

The one ingredient to be universally infused is gladness. Everybody can, at all events, *endeavour* to bring goodwill and a smiling countenance to the festive board, banishing for a time the recollection of every-day worries. There is all the rest of the year to think of them. This is peculiarly the children's time, and we would have them as happy as we were in the old Christmas Days of long ago.

The party may assemble only on Christmas Day, or the house may be full from Christmas Eve until over Twelfth Night; in both cases much depends upon the hostess.

I think it was Lord Beaconsfield who said that happiness was atmosphere. To bring about a general feeling of enjoyment, much depends on the surroundings. The house must be cheerful, the ruling power animated. It is worth while to bestow some little trouble on the decoration of the rooms. Have plenty of shining holly, and laurel too, and don't omit the mistletoe, for we have long ago forgotten all about the paganism, magic, and superstition which surrounded it, and have relegated it to scenes of social merri-

ment. Many a shipload I have seen despatched from St. Malo, the French people hardly understanding its subsequent purpose, and a very good trade is done with it in the West of England.

I like to see a motto of welcome wrought in holly hanging in the hall, and in the yearly volume of Cassell's Family Magazine for 1877 there is an article, "How to Decorate the House at Christmas-time," with many useful suggestions. Flowers brighten up a room wonderfully, and should you have enough and to spare, I would advocate the American plan of making bells and balls of flowers to hang beneath chandeliers and over doors. They look best entirely of one kind of bloom. The balls are easily made by tying the ends with string, the bells require a foundation of the bell shape. Last year we made this of crinoline wire covered with coarse muslin about twelve inches long, and hid it entirely with mistletoe; the waxen berries looked extremely pretty among the greenery as it hung over the doorway.

See that there is an abundance of Christmas literature about. Servants and children as well as the grown-up guests delight in looking at pictures. A pretty, well-written story of Christmas happiness is wont to diffuse a sense of enjoyment among its readers. The glowing freshly-written pictures of the Christmas shops and the holiday people in the Christmas numbers of our magazines inspire us with a renewed power of happiness as each season comes round.

Be sure that your hearth burns brightly. Though the yule log of Scandinavian origin is no longer drawn in by household retainers, bestridden by old Father Christmas, to be kept alight if possible to Candlemas, you will have no bad substitute in a fair-sized piece of ship's timber crackling in the grate.

It does not come within my province to enter upon the question of Christmas cheer. The board should be as liberally spread as means will allow. Children delight in a substantial tea, over which their elders can preside before their own Christmas dinner is served. An abundance of crackers and bon-bons add to the general fun—which, by-the-by, I have known enhanced by drawing lots for partners at the dinner-table.

Everybody likes presents, and presents are inseparably connected with the season. Queen Elizabeth so delighted in them that even her "kitchen wenches" presented her with lozenges; and fans, bracelets, and treasures of all kinds poured into the royal lap when December came.

There are two points to be considered: first, what to give, and then how best to make the giving a source of pleasure. The poor should not be forgotten. A good plan is the Christmas basket, carried pedlar fashion into the hall, and its contents distributed by all the members of the family to the poorer neighbours invited to be present, and to the servants. Such charity is doubly welcome accompanied by kindly words and wishes, and it greatly delights the young people to see their handiwork appreciated.

Christmas-trees, which the Prince Consort introduced among us nearly forty years ago, have established their fame, and there is not much that is new to be told about them. They have this drawback, that in removing the presents there is a danger of fire; and it is not a bad arrangement to hang the tree itself with beads and glittering balls brilliantly lighted, and set the presents round the table well wrapped up, a small lighted doll's-candle by each; the children are thus able to examine their gifts by the light of their very own candle. A snow-ball about a yard in circumference, made in two halves, with calico covered with wadding, on a wire foundation, filled with presents, may be rolled into the room and allowed to burst open, when a general scramble ensues. A gipsy-tent rigged up in a back drawing-room, with a presiding gipsy up to her work, who distributes the gifts with an appropriate word or two to each recipient, or a post office or parcels delivery office, with some bustling officials, may be made to produce a great deal of fun. We had a very successful distribution once from a hen's nest, concocted out of a clothes-basket, the gifts wrapped up to represent eggs, and the whole surmounted by a stuffed hen; but it went off so well because we had a clever henwife, who, dressed in flowered skirts and a high pointed cap like Mother Hubbard, delighted everybody. Another year we had a Cheap Jack, who made many of us forget the pleasure our presents gave us by the roars of laughter he produced, standing in the centre of the drawing-room ottoman, and, with many a merry *bon-mot*, scattering the parcels here and there. The Mummers, the Lord of Misrule, St. Nicholas, or Knecht Rupert may be made to put in an appearance and give away the presents. Knecht Rupert, in Germany, makes the distribution according to the deserts of the children, dressed in a white robe, a mask, flaxen wig, and high buskins. The Lord of Misrule wears the high top-boots of Charles II.'s time, ruff at throat, and a flowing robe. He disappeared in 1640, but before that he presided over Christmas festivities in the houses of the king and nobles, and the Mayor of London, from Allhallow Eve to Candlemas Day. He has been resuscitated of late for the special purpose of present-giving on more than one occasion.

A Christmas ship has the advantage of being very pretty, and of exercising some ingenuity. A boy clever at carpentering could even make a good-sized one. The presents are concealed in the hold; two feet long is a good size, and the rigging crystallised with alum to look like snow is a great improvement.

These distributions may take place at night or during the day, but at this season there is plenty to amuse during the day-time—long walks, when the weather is favourable, or maybe skating, and a good game of battledore and shuttlecock—or the improvement upon it, Badminton—in-doors, if it rains; in which case, too, let me recommend bean-bags. For this make four bags six inches square, of strong holland, and half fill them with dry peas. The two players stand before each other, a bag in each hand, and

throw simultaneously with both hands. The bag hurled from the right hand must pass to the left hand of the *vis-à-vis*, while the bag in the left hand is passed to the right, and the left hand receives the opponent's bag from his right hand. The double movement is difficult, and requires knack, but is good exercise.

If the skating-ground be near the house, some hot drinks are most acceptable, especially to those standing on the banks. I give the recipe for one which is always approved, viz., egg wine :—Beat up two eggs, and add a little cold water; boil one pint of elder wine with spice, then beat all well together, pouring from one vessel to the other, replace it on the fire till it boils, and drink when quite hot.

When the Vicar of Wakefield's altered fortunes obliged him to repair with his family to a distant neighbourhood, we read how his new parishioners "kept up the Christmas Carol, sent true love knots on Valentine's Morning, ate pancakes on Shrovetide, showed their wit on the first of April, and religiously cracked nuts on Michaelmas Eve;" and these observances of old customs would seem to savour of a taste for simple pleasures. If carol-singing be one of them, it is certainly being revived amongst us, and this delightful form of musical amusement by young people is a Christmas pleasure worth cultivating. "God rest you, merry Gentlemen," and "Nowell, Nowell," date back to Henry VI.'s time; "Come let us all sweet Carols sing" is of German origin; and "We three Kings of Orient are," American; but there are many admirable collections.

If you bring your entertainments from without, there is a choice of conjuring, a Punch and Judy show, bell-ringing, fantocinni, and the magic lantern. In the latter each year there are marked improvements, and you may follow the fortunes of Tam o' Shanter, Don Quixote, the Forty Thieves, and Johnny Gilpin, or visit the scenes of the Afghan or the Zulu War, or discover the wonders of the microscope, or enjoy the pranks of a Christmas pantomime as displayed from the lens on the white sheet.

Besides bagatelle, loto, spelicans, dominoes, and the rest, there are some newer games, such as Chinese Gong, viz., a wooden stand with a pasteboard gong having a hole in the centre, into which the players throw one of six balls, which fall into numbered receptacles: Patchesi, or Homeward-bound, a round game between draughts and fox and geese; gobang, fishponds. "How Stanley attained Congo," "Doggett's coat and badge boat-race," are amusing too, and each week something new is brought out.

Recitations are just now very fashionable, and it is quite worth while to prepare some beforehand. Do not let them be too pathetic. Shakesperian readings always please, I mean those in which each part is read by a different person, but read carefully, and studied beforehand. A diversity of such amusement each evening would make a fortnight or three weeks pass all too quickly, and render the remembrance of Christmas time memorably pleasant. Recitations from good and entertaining authors never come amiss.

I cannot do better than conclude with one of the best of Christmas good wishes, which we owe to one of them: "Many merry Christmases, many happy New Years, unbroken friendships, great accumulation of cheerful recollections, affection on earth, and heaven at last."

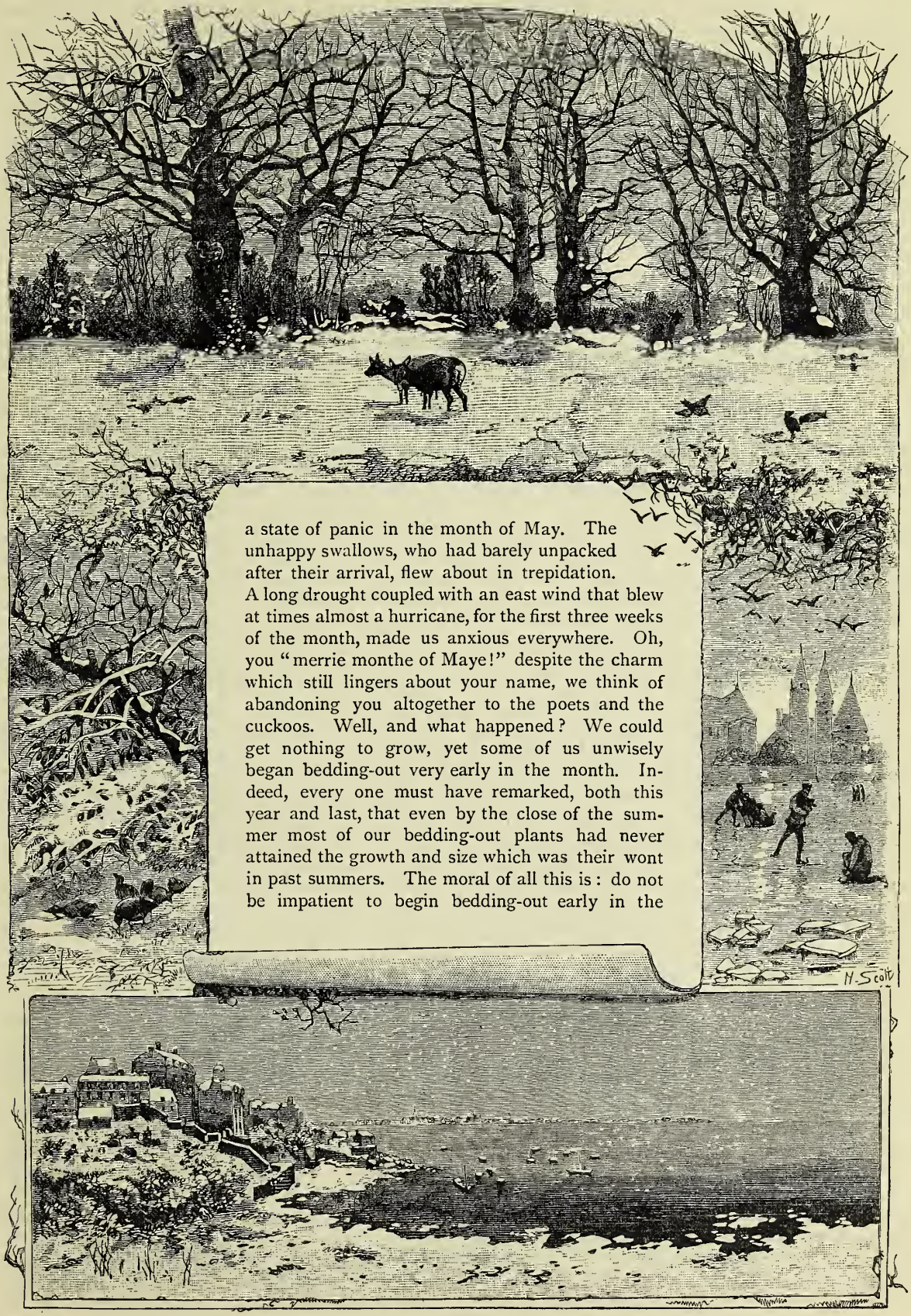
ARDERN HOLT.

GARDENING IN DECEMBER.

PERHAPS we are growing weary of the old year, but at all events we know for a certainty that the old year is growing weary of us, for very soon we shall be bidding adieu to it. Not unfrequently we weary of our very pleasures, and find ourselves craving after some new and unbeaten track of recreation. A new thing—a real "hit" in Christmas cards, or a new game that would even cut out lawn tennis, which in its turn has supplanted the once popular croquet—would probably make the fortune of the inventor. Even at this season of the year, when we are all so happy in the prospect of our annual fireside reunion, is it not possible that perhaps a certain portion of our happiness is derived from the mere fact that we are entering upon a *new* year? Well, and doubtless this is natural and justifiable enough. But it may be asked, what has all this prelude to do with gardening? Nothing, perhaps, saving only that we gardeners are of opinion that the familiar yet ever-new delights of our craft contrast most favourably with any pleasure that can be attained in this feverish and restless chase after a new toy.

"Here we are again" then—as the children's favourite jester will soon tell us—"here we are again," all rosy from our hearty and invigorating work, with the spud over our shoulder and the trowel in our hand; "here we are again," with the frost-spangled landscape for our scenery, nor are we in any degree weary of our performance, as time we hope will show.

December, then, being not unnaturally a month for retrospect, we may perhaps with advantage, before giving our few general hints for gardening operations at this time of the year, look back and say a word upon our failures and successes, and upon the possible causes of each. Up to the end of March in this year 1880, that will soon be a thing of the past, we gardeners were in great hope. January and February were "seasonable" to the very letter, and in the third month we augured most favourably from the good "peck of dust." But if we took fright at the return of the cold in April, we got almost into



a state of panic in the month of May. The unhappy swallows, who had barely unpacked after their arrival, flew about in trepidation. A long drought coupled with an east wind that blew at times almost a hurricane, for the first three weeks of the month, made us anxious everywhere. Oh, you "merrie monthe of Maye!" despite the charm which still lingers about your name, we think of abandoning you altogether to the poets and the cuckoos. Well, and what happened? We could get nothing to grow, yet some of us unwisely began bedding-out very early in the month. Indeed, every one must have remarked, both this year and last, that even by the close of the summer most of our bedding-out plants had never attained the growth and size which was their wont in past summers. The moral of all this is: do not be impatient to begin bedding-out early in the

month. And now what happened in the fruit-garden? Our walls were ablaze with peach and nectarine blossom. It was very pretty to look at, but for all practical purposes, alas! we might in most places as well have plucked it off and given it to the little children for their May-day sport. Peaches and nectarines were selling in the September following for as much as ninepence apiece. We should, then, have been more particular in our protection of the blossom in such an unprecedented month as last May was.

But it is time that we said something upon the gardening routine for the bleak and dark month that is now upon us. The gloriously rich autumn weather, that was of such priceless value for the harvest and for the hops, made us hardly conscious indeed that autumn had come. Hence the foliage remained on our trees unusually long. But all is down now, and very possibly a good deal has still been allowed to lie carelessly about. Yet it is annoying to pass along some of our country roads at the fall of the year, and to be half choked by the smoke of the burning leaves. Why all this waste merely to save a little trouble? Leaves, if got together when dry, make admirable litter for our pigs; indeed you will see on our commons many of the more thoughtful and provident of the poor gathering up leaves and carrying them off in sacks for the endless purposes for which they are useful. If we do not care to go to the expense of sea-kale pots, we manage as well as we can with leaves over our kale, perhaps placing some old box first of all over the kale itself and then piling the leaves on. These leaves, again, we pile up in the open part of some unused pig-sty and allow them to rot down for leaf-mould, or some perhaps we put away under the shelter of the sty itself, in order to keep them in a dry state for other purposes; and, lastly, perhaps the most common use that we find for them is to dig them in, for they make admirable manure. A stroll at almost any time of the year under the trees of some large preserve or plantation will show you what the condition of the soil is, if only you are at the trouble to turn it over with your foot or walking-stick. A rich dark mould, almost fragrant, is what you will find underneath; and recollect that Dame Nature has been the only gardener. No rake or spud or hoe has probably for many years ever been seen there, but season after season have the leaves blown down and rotted upon the surface. The lesson, then, as to what use to put our leaves to is sufficiently apparent. Our hedge, rose, or gooseberry cuttings—anything prickly, in fact—should always, however, be burnt, or the consequences of having these pointed fragments all about or immediately under the super-soil are by no means pleasant for the hands.

A well-selected assortment of shrubs and evergreens in the garden is especially useful at this time of the year, for they help much to relieve the eye as it wanders over the now barren and naked and leafless branches of other trees.

Moreover, now is a good time of the year, when the sap is all down, for making or altering a shrubbery, provided always that we have good open weather and little or no frost, and this is really very often the case in the month before Christmas. Evergreens, then, from the very fact of their variety of foliage, both in colour and form, are for the most part our flowers just now, where at least we have no greenhouse or conservatory. How marked, for instance, is the contrast between the ordinary and the Portugal laurel! This latter will in some localities run up to tree-like dimensions, and in the case of setting up a shrubbery, say on some embankment or gentle slope, possibly with the object of shutting out some ugly building or unsightly outhouse, it is well to have these Portugal laurels for your top row. Then, again, there is a great variety in all the Pinus and fir tribe, less perhaps though in the Arbutus family. Avoid, however, in making a shrubbery, that too common error of having your trees put in too closely together—in fact of having too many. The demand made upon the nutritious properties of the soil, as well as the drip from one upon the other, is fatal to their well-being, and in a year or even less you will find that some have died outright. An admirable time of year this is, too, for laying out a lawn; take care to have your surface well and carefully levelled before your turfs are laid down; a turf is generally a foot wide and three feet long, so that a very little arithmetical power will be sufficient to tell you the number of turfs required when once you have got the dimensions of your lawn that is to be. Perhaps from eight to ten shillings per hundred is their price.

A good deal of our work at this time of year is of course done under our glass, if we are fortunate enough to possess such a luxury. And very often the happy proprietor of a small pit in which he can hardly stand upright, and where his space is very confined, finds a greater delight in attention to his bedding-out stock of cuttings and his few camellias and cinerarias than the Duke of Omnium himself, who rarely enters his pineries and his graperies at all. As we have said before, the routine management of our pit or greenhouse at this time of the year must always vary with the weather which is upon us. If anything, however, err rather on the side of having your house too cold than too hot by overheating your stove. Your plants will feel all the more keenly the severity of January, which has yet to come, if you are fond now of keeping up perpetual large fires. Be guided by your shilling thermometer that of course you hang up in your greenhouse, and let your temperature be at from forty to fifty degrees by day, and from thirty-six to forty by night. Nor be now too fond of the watering-pot: it may almost during this and the next month be discarded. Avoid also at this time of the year shifting your plants—repotting we mean—for occasionally the new soil round the roots of your plant might injure it, more particularly if it be very damp.

Re-arranging your greenhouse just now, however, is quite another thing, and a pleasant day is often passed in this way when the snow is lying thick on the

ground and we can do little outside; dirty pots, too, may then be washed and neatly put away; odd pieces of tile for crocks and drainage got together, and the names of plants written on little smooth and flat pieces of wood ready to place by your flowers. These, of course, can be bought all properly painted, but there is a satisfaction in doing all these sort of things oneself on a pouring wet day in the carpenter's room, or perhaps the children's playroom.

In dry and frosty weather, turn over your compost heaps, so as to get the frost to act well upon the interior—in plain terms, turn your soil inside out—and then pick out all the grubs and insects which you have probably disturbed in their deep winter sleep, and speedily consign them to a yet deeper slumber. We gardeners must be content to be called cruel sometimes; yet there is a distinction between being so and being called so.

And those few plants near our window that we call our window garden, we must not forget them. Plenty of light, *very* little water, and protection from frost at night, is what they want. In very severe weather don't let them stand too near the window—your window with a south aspect of course. But during the best of the day give them plenty of air, or at all events *some*. Death is coming, we know, speedily enough to hurry away 1880, but through a window that is *never* opened it finds its way stealthily but surely, not only to flowers inside, but to their owners. Open the windows then—and once this month even at midnight, to hear those bells from the venerable grey tower

"Ring out the old, ring in the new."

CHRISTMAS DINNERS.

BY A. G. PAYNE, AUTHOR OF "COMMON-SENSE COOKERY."

THE great difficulty in dealing with the subject of Christmas dinners is that anything in the shape of novelty will cause the dinner to cease to be a Christmas one. A Christmas dinner, to my thinking, does not mean a dinner at Christmas, but roast beef, goose, turkey, plum-pudding, mince-pies, &c. Were we to have, say, roast beef, plum-pudding, and mince-pies in August, the one remark that every person present would make, would be—"Why, this is quite a Christmas dinner!" I will therefore give a few suggestions in regard to these essentials, and pass on to a few dishes that may be made at Christmas time, and which will form nice and suitable additions to Christmas dinner-parties not necessarily given on the day of the feast itself.

First, the beef—the large sirloin which the butcher assures us is *Christmas beef*, as if he would fain have us believe that bullocks about this time of the year become for a short period superior animals to what they are at other periods. I will not enter into the roasting beyond saying an open fire is, of course, best, but much depends upon the way it is served. First impress upon your cook the importance of having the dish on which it is served hot—not warm—so hot that the carrier up-stairs wants a cloth in each hand to prevent the fingers being burnt. Next a little gravy in the dish—enough, of course, for the first help all round. Let the rest of the gravy be kept in a saucepan, and brought up nearly boiling, and poured over the joint in time for the second help. Let the carver help not too largely at starting, and then for the second help let a fresh pile of hot plates appear, and a clean knife and fork all round.

As a rule, in middle-class families, the Christmas dinner is essentially a family one, and there are few if any entrées. There is a great deal of nonsense talked in the present day about giving servants trouble. To some a second help on a hot plate, with fresh hot gravy, in distinction to the smeary plate with wafers of fat, that the plate which contained the first held of necessity becomes, means the difference between a good dinner and a poor one.

For a roast goose or turkey the same directions hold good: send up a little gravy to start with, and then send the tureen down to be filled up with hot gravy later on, when it is wanted for the second help. Apple sauce possesses the amiable quality of keeping itself hot, even in the coldest weather, for a considerable period, if made in any quantity.

With regard to plum-pudding, I think the chief fault, especially where there are children, is that too great an effort is made to make it as rich as possible. It no more follows that the richest pudding is the best than that you would improve hot bacon by buttering it. For grown-up people who just taste the pudding, it does not matter so much; but children want to enjoy it, and themselves afterwards; try and avoid making these two things incompatible.

Mince-pies are generally made a day or two beforehand, and cooks sometimes forget what a long time they take in getting hot through. A mince-pie to be worth anything must be hot enough to burn your mouth. Hot crust with the mincemeat lukewarm in the middle—and I think we must all admit that we can remember mince-pies in this condition—is a sad failure, especially considering what a lot of trouble has been taken over making the mincemeat, &c.

A very nice wind-up to a Christmas dinner is—or rather was, some five-and-twenty years ago—a nice Stilton cheese and some fresh crisp celery. Unfortunately, I am unable to tell you what has become of the Stilton cheeses like what I can remember in the time I allude to.

If you have boiled turkey and oyster sauce you will find it a great improvement, as well as a great saving, to get a tin of oysters, in addition of course to some fresh; but the tin will save buying so many fresh, which are now very dear. Take the fresh oysters and open them over a basin, saving the liquor. Scald the oysters for a few seconds, and put them by. Add the tin of oysters to the oyster liquor, and both to some milk, boiled separately. Thicken with a little white roux or butter and flour. Or, as milk is used, you can thicken with a little arrowroot or corn-flour, which is less troublesome. Then rub the whole through a wire sieve with a wooden spoon. The uneatable tinned oysters when thus reduced to pulp not only help to thicken the sauce, but materially add to the flavour.

Indeed, I would ask you next time you have, say, a piece of boiled codfish to try some oyster sauce this way without any fresh oysters in it. Take the tin and boiled milk, &c., and rub the oysters through the wire sieve, and call it if you like oyster melted butter. In any case, whether arrowroot is used to thicken or not, butter must be added, and melted into the sauce; the more butter, the richer the sauce. Do not forget also to add a little cayenne pepper, a good tea-spoonful or more of anchovy sauce, this latter being a great improvement, and a few drops of lemon-juice. Now that tins of oysters can be bought for 4½d. this oyster sauce is well worth making. The same sauce moistened with white stock makes good oyster soup without any oysters in it. A small tin of mushrooms can be added to the soup, sliced up. It is very nice and, at any rate, far more economical than buying fresh oysters.

A nice entrée at Christmas, when, owing to the cold weather as well as other causes, we can bear a somewhat richer living than at ordinary times, is *Poulet à la Marengo.* Take a fowl and half roast it in a quick oven or before a fierce fire. Take it out, and let it get quite cold, and then cut it into small joints, cutting the breast, including the merry-thought, into five, and the back into four joints. If the fowl is a large one, cut the thigh into two; but if small, leave it whole after separating it from the drum-stick. I may here observe that the proper way to commence to make *Poulet à la Marengo* on a large scale, and where there is every facility of kitchen utensils, time, &c., is to cut up the fowls raw, and fry the joints in oil or clarified butter till they are of a nice brown. In private small kitchens the previous method will be found more practicable. Next, have ready some good brown gravy, similar to what you would serve with a goose or turkey, add to it a tin of mushrooms, and two or three table-spoonfuls of tomato sauce pulp. Take care the tomato sauce is good, and not an acid imitation made chiefly from carrots.

Warm up the underdone joints of fowl in this sauce, letting it stew gently, but not boil. Pile the fowl up in the centre of a dish, and place on it some nicely fried eggs. These eggs should be browned all over, not cooked like eggs for eggs-and-bacon in a frying-pan with a dab of grease, but simply boiled in fat that will cover them. Cut some bread into wedges, and fry this a nice golden-brown colour in deep fat. When you take the bread out of the fat do not put it on a cold plate, but on to a hot cloth or, far better, some blotting paper, and keep it in a hot place till the fat is drained off the bread, which would otherwise taste greasy. A few stoned Spanish olives may be used to ornament the dish, and will be found an improvement to it in flavour as well as appearance.

Very often at this time of the year there is a great deal of cold turkey left. Now, if the turkey be in any part at all underdone, it can be cut into small pieces and treated in an exactly similar manner. Care should be taken in this entrée to avoid having the joints large, as it is difficult to help oneself to the dish in this case without making an awkward upset. Take care also when you use turkey that none of the stuffing gets mixed up with the *Sauce à la Marengo.*

Stewed pigeons cooked as follows make a nice entrée:—Get some small button onions, the size of marbles, and fry them a nice brown colour in a little butter. Cut the pigeons in half, and brown them in the same butter quickly, and then place them with the onions in a stewpan with some good gravy and a small tin of mushrooms. Take care to skim the gravy carefully so that it is not sent to table greasy.

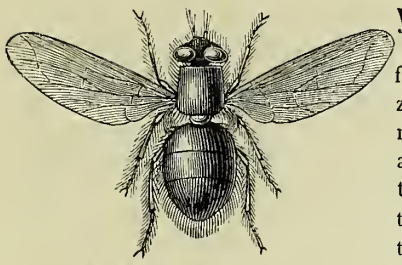
As a rule, in private houses, I think less difficulty is experienced in making a variety of sweets than in getting any great change in entrées. I would remind you how very useful tinned fruits are, such as preserved peaches, apricots, &c.; a few tins can always be kept in hand, and a few minutes only are required for their being served. A great deal can also be done in the way of making ornamental borders of rice or corn-flour and filling up with preserved fruits. In ornamenting sweets, preserved angelica and preserved cherries will be constantly found useful, and if a little of each is always kept in the house a pretty dish can be made at a few moments' notice.

There is one set of dishes at the present season particularly in vogue, and that is nice little supper dishes. I will mention one simple and pretty. I will first, however, suppose that some cold turkey or some cold chicken has been left. Cut the meat from the bones, placing the white meat from the breast at the top, and surround this piled up in the centre of the dish with some "macédoines" out of a tin. I may mention that macédoines can be bought in tins, and are cooked mixed vegetables, and form an admirable salad when cold. They can be dressed with oil, vinegar, pepper, and salt like an ordinary salad, and some hard-boiled eggs can be placed round the base. A little chopped beetroot would improve the appearance of the dish.

The drum-sticks left from turkeys are best devilled. Slice the drum-stick down with a sharp knife to the bone in several places, and insert in the cracks some French mustard mixed with cayenne pepper. Then butter the leg slightly, and grill it over a fierce fire on a gridiron, and serve it quickly like a chop.

ONLY A COMMON FLY.

BY DR. ANDREW WILSON, F.R.S. EDIN., LECTURER ON NATURAL HISTORY IN THE SCHOOL OF MEDICINE, EDINBURGH.



BLUE-BOTTLE (MAGNIFIED).

WHERE can hardly be found a topic for zoological treatment which more aptly combines the scientific with the familiar than the history of the insect whose name heads the present paper. Familiar to the verge of contempt, the common fly, which annoys us in summer, torments our existence, purloins our dainties, and destroys our household belongings, is nevertheless an object regarding which no one outside the scientific world can well venture to express an opinion. Where does it come from? How is it developed? How does it live? What is its structure? These and many similar queries might be asked in despair of ordinary cultured intelligence. The ignorance which besets the history of the fly is really on a par with that which surrounds the details of many other common objects.

That there are flies and flies, is matter of ordinary observation. Hence it becomes necessary, as a matter of common correctness, to define satisfactorily the limits of fly-existence and structure. There exist within the limits of the insect world not merely common flies, but day-flies, dragon-flies, May-flies, and the like. To which group does our common fly—*the* fly *par excellence*—exhibit closest relationship? It may firstly be remarked, in answering this question, that in the eyes of the naturalist all true flies belong to one order of the insect class. This order is that of the *Diptera*, a name easily translatable into the word "two-winged." Our common fly has but two wings. So also the blue-bottles, the crane-flies, or "spinning jennies," the gall-flies, which give us the valuable vegetable product of that name, and all other flies, properly so called, possess but two wings. This character may therefore be regarded as an important and reliable family feature of the flies; and it may prove of interest to ask and answer the question, "Which pair of wings does the fly and its relations possess?" We must bear in mind that the normal number of wings in the insect is four. Bees, butterflies, and moths possess four wings; and the beetles, crickets, grasshoppers, and other forms have likewise two pairs of wings; although in these latter insects the front pair of wings is rendered hard and horny to serve as covers protecting the hinder and serviceable pair when these are folded and at rest. Now the wings of an insect, like its legs, are limited to the chest-region; and every insect has but three joints in its chest. The first joint bears the front pair of legs, the second bears the second pair of legs and the first pair of wings, whilst the third joint bears the second pair of wings and the third and last pair of legs. With this knowledge at hand it is easy to discover which pair of wings the fly possesses. If we examine its chest, we find that the second joint bears the fly's wings; but the third and last joint, instead of possessing wings, bears a pair of slender filaments named *halteres* or *poisers*. Hence it is clear that the single pair of wings of the fly corresponds to the front wings of those insects possessing two pairs, and we may therefore define all true flies at the outset of our studies as insects possessing two wings only, these being the front pair.



HOUSE-FLY.

No part of fly structure is more wonderful than the mouth. Watch a common fly alight on a piece of sugar. From the under surface of the head, apparently, is unfolded a long organ looking very like an additional leg; and with this structure the fly scrapes the sugar, licks up the cream, spoliates the jam, and as we shall presently note, effects destruction in other and varied ways. To understand what the organ in question is, let us briefly glance at the typical structure of the insect-mouth. Four sets of organs or appendages compose the "mouth." There is first an upper lip, then a pair of large jaws, then a pair of lesser jaws—forming a tube or tongue in butterflies—and last of all a lower lip. In a beetle the chief mouth organs are the greater and lesser jaws; whilst in a bee or wasp the jaws are also well developed for the work of the hive, but the under lip forms a "tongue" wherewith the bee sucks up honey from the flowers. Now in the fly, the mouth parts are of modified nature. Speaking generally, the "jaws" are represented by small bristle-like organs, and the upper lip is developed; but it is the labium or under lip which comes to the front in the development of the fly's mouth. Here it forms, as in the bees, the chief organ of nutrition. It is the under lip which we see unfolded from beneath the head when the fly attacks the sugar. And when we place this organ beneath the object-glass of our microscope we can readily discover the secret of its service. The "tongue," as we may term the under lip, consists of a stalk highly movable and muscular, at the end of which a couple of broad leaves expand outwards from the middle to



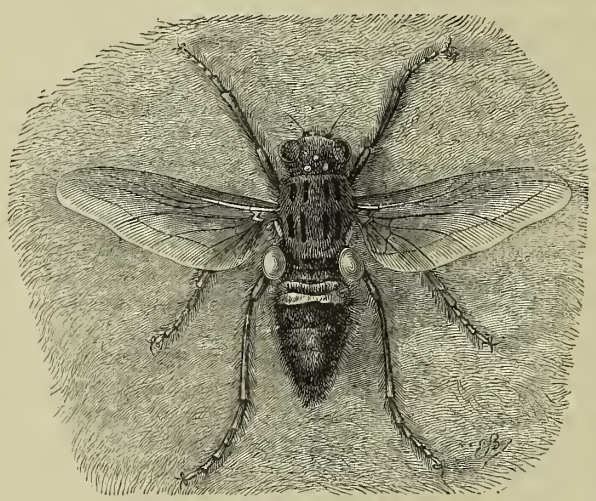
HORSE-FLY (MALE).



HORSE-FLY (FEMALE).

form a sucker-like organ, beautifully adapted for licking up fluids and for scratching solid matters also. This fan-like end is supported on a firm tubular framework acting as a set of springs to open and shut the fans, whilst the microscope shows us that this structure is really like a file or rasp in its nature. We can understand, then, readily enough how such a muscular organ can be used for the purposes of fly-nourishment. When, after a summer of flies, the morocco covers of our books and the finely-polished surfaces of our furniture are scratched and eroded, we can readily appreciate the cause of the damage. The fly's tongue is a file wherewith it wages war even on ourselves. For, as a famous authority on insects remarks, it is by its means that the fly "teases us in the heat of summer, when it alights on the hand or face to sip the perspiration as it exudes from, and is condensed upon the skin."

Few facts of insect-history at large and of fly-history in particular are more interesting than those which relate to the power and muscularity of the wings. It is almost incredible, but nevertheless true, that the common fly moves its wings 330 times *per second* when held captive. This fact is given on the high authority of M. Marey. In the same time a bee moves its wings 190 times, whilst a butterfly's wings vibrate only some nine times per second. Landois, in his important researches on the sounds produced by insects, says that a fly humming on F moves its wings 352 times per second, and the bee humming on A♯ moves its wings 440 times. The tired bee, according to Sir John Lubbock, hums on E♯, and vibrates its wings 330 times per second. The language of flies and bees is therefore truly expressed by "voice." The placid "hum" of a well-contented fly is a very different sound from the angry "buzz" of the irritated insect; and the expression of insect-emotions is therefore an interesting study in view of the mechanism which produces the sounds wherewith the feelings of the animal are manifested. Landois says that the normal "hum" of flies is due to the air passing in and out of the breathing-holes of the chest. Insects breathe, it may be mentioned, by means of air-tubes which ramify throughout their bodies, and which convey air to the interior of their frames for the purification of the blood. The breathing-holes alluded to exist in the sides of the body, and open into the main trunks of the breathing-tubes. It is these apertures, then, which are credited with producing through the passage of air the normal hum of the fly. When in flight, an ordinary low tone seems to be produced by the movements of the wings; and the sharper "buzz" which follows when a fly is held by the wings is believed to be due to the wing movements aided by the rapid movement of the abdominal segments.



BOT-FLY.

The fly is decidedly cosmopolitan in its taste. It feeds upon a very miscellaneous dietary, as ordinary observation proves, and it is provided by nature with a digestive system of tolerable complexity by way of providing for the wants of its commissariat. There is a "sucking-stomach," used for drawing up fluid nourishment, and for transferring it to the true digestive stomach close by, whilst there are also tubes which represent the liver and kidneys of other animals. The fly, like every other insect, carries its heart on its back. The heart is a tube divided into numerous compartments, each separated by a valve from its neighbours, and each sending the blood forwards toward the head. Returning to the heart, the blood is purified by the air contained in the breathing-tubes before mentioned. The fly's nervous system lies on the floor of its body—the natural situation of the nervous axis in insects — and instead of being a chain of nerves as in most other insects, the fly's axis is much compressed and concentrated, and gives to the insect that wariness and agility it is well known to possess. With organs of sense our fly is well provided. Touch is performed by the feelers, and taste is probably subserved by the palpi of the mouth. Organs of hearing are unknown, as also is an organ of smell, but there can be little doubt that both senses are present — in an unspecialised state, no doubt, but still sufficient for all the purposes of fly-existence. The eyes already mentioned are prominently seen as two great masses bulging out on each side of the head. In insects at large these compound eyes form one of the most remarkable features of their structure. Each compound eye in a fly contains over 2,000 separate *facets* or eyes, and we know of insects which possess 20,000 facets; a few simple and single eyes being also found on the top of the head or on the chest. Each facet or eye of the compound mass further exhibits a complex structure. It has a lens, a cornea, a sclerotic coat, and other belongings of higher eyes. But how or what a fly sees, is quite a different matter, for we do not yet clearly know how such a complex eye—complex as to the number of its individual parts at least—exerts its functions. Cray-fishes, lobsters, and crabs possess compound eyes of wellnigh similar structure to those of the fly; the crustacean eyes, however, being

mounted on movable stalks. That the visual powers of a fly are tolerably acute is a statement requiring no corroboration, and the difficulty of capturing the insect must largely depend upon the aid afforded by its eye-masses in determining the nearness of danger.

Our fly, like every other insect, has but six legs. In this respect it differs (along with all other insects) from spiders and mites, which possess eight legs.

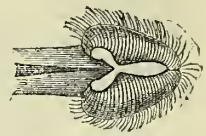


LIPS OF THE PROBOSCIS OF A FLY.

One of the most curious features of fly-existence is the well-known power these insects possess of walking with the utmost ease and dexterity upon ceilings, walls, and other smooth surfaces. The investigation of the legs of a fly reveals the mechanism whereby this feat is performed. The foot consists of five joints, the last joint ending in a kind of double claw. Between these claws is a soft cushion-like structure or *pulvillus*, which consists of several fleshy sacs or vesicles. The surface of this cushion is covered with hairs of a tubular nature. These are believed to secrete a gummy or viscid fluid, and by aid of these soft adhesive cushions the free locomotion of the insect is secured upon any surface, however polished and smooth it may be.

The question, "Where do flies come from?" is perhaps as often asked as any other query respecting these insects. Flies hibernate during winter, and the eggs appear to be deposited in August and September, generally amongst manure or decaying organic matter of other kind. The fly, as already remarked, passes through a larva or caterpillar stage, and through a chrysalis form, like the butterflies and moths. Hence, from each egg of the fly comes forth in the spring or summer a little maggot or larva of yellowish-white colour, smooth and fleshy, and attaining a length of some four lines. The minute size of the larval fly sufficiently explains why the earlier stages of the insect's existence escape popular notice. Feeding on organic and decaying matter, this larva frequently moults, and sooner or later becomes the quiescent immobile pupa or chrysalis. Unlike the butterflies and moths, the fly does not spin a cocoon wherein to enclose its body, but passes its chrysalis stage within the skin of the larva. The chrysalis of our fly is about three lines in length; and in this state the insect remains from seven or eight to fourteen days.

Within the body of the quiescent chrysalis wondrous changes are meanwhile proceeding. There is no external sign of activity, yet a physiological revolution of a sweeping nature is taking place in the history of the larval fly. Its tendencies as a maggot are all in the way of nutrition. It increases in size during its maggot stage, and it then lays up a store of matter from which in due time the body of the perfect insect will be formed. But the production of a fly from its larva includes certain other curious facts worth mention and remembrance as essential features of the fly-biography. As the footless maggot leaves the egg there are found in its interior certain curious bodies to which the name of *imaginal discs* is given. These bodies number fourteen; twelve are situated in the chest region, two above and two below in each of the three segments; and there are two other discs placed near the front part of the maggot's body. In the larval state the discs exhibit little or no change; but when larval life comes to an end and chrysalis existence begins, then the discs enlarge. Through their growth certain wonderful changes happen to the larval fly. Each of the two discs in the floor of each chest segment develops a leg and half of the floor of the segment; and each of the discs in the upper half of the chest-joints forms the wings, the halteres, and the remaining part of the segment to which it belongs. In front, the head and mouth parts are likewise being formed from the two foremost discs; and as development proceeds, the contents of the head and chest of the maggot undergo a literal process of breakdown, and are in due course built up anew to form the organs of the perfect fly. The larval tail, on the other hand, becomes that of the perfect fly, with little further change beyond that induced by the process of ordinary growth.



EXTREMITY OF THE PROBOSCIS OF A FLY.

Thus the very process which produces the common fly and its neighbours is in itself an example of wondrous transformation. Yet the insect is not alone in its affording a text whereon science hangs a tale both interesting and instructive. That spirit of inquiry which seeks to know the "how" and "why" of common things is perhaps, after all, nearest akin to the frame of mind which from humble beginnings may attain a lofty philosophy; and it may be added that there are many less likely starting-points for such philosophy than the endeavour to answer the question, "What is a fly?"



EGGS OF THE GAD-FLY DEPOSITED ON THE HAIRS OF A HORSE.

FAITHLESS MARGARET: A CHRISTMAS STORY.

BY FRANK BARRETT.

I.

"MR. CLYVE'S sure to be back soon, sir, for he's left the key in the door," said the housekeeper.

"In that case I'll wait for him," replied Mr. George Thornton, and without hesitation he opened the door and entered the empty chamber. The housekeeper looked after him, hesitated a moment, and then descended to her rooms in the basement—her fears of thieves and vagabonds dispelled by the easy assurance, the gentlemanly bearing, and the good looks of the visitor.

"Not a thing altered," said Mr. Thornton to himself, as he looked round the room, "the same rows of awful books—no wonder that lawyers grow as yellow as their parchment with such indigestible food as that for their minds—the same hideous old engravings—the same comfortable old chair"—he sank into it as he spoke, with evident appreciation. His eyes were suffused with warm affection as they dwelt upon the objects that revived old memories. Then he lolled back in the roomy, comfortable chair, with his fingers knitted over his knees, and in this attitude of comfortable contemplation Geoffrey Clyve found his young friend when he opened the door.

"Geordie!" he exclaimed, crossing the room with his hand extended, "what brings you here?"

"Come to say good-bye, old man—leave England to-morrow."

"Where are you going?"

"To the North Pole if I can get there."

The two friends stood face to face, Clyve still grasping Thornton's hand with an expression of astonishment and interrogation in his kindly face.

"You have heard of the proposed expedition?" Thornton asked.

"Of course; I read the papers; but you, Geordie—"

"I have the honour to sail in the same vessel with Captain Blake. And why should I not go? I have no ties, too much money, and not enough moral stamina. Hardship will be good for me, and the Arctic Circle is about the only one where a man with my disposition can escape the vitiating influences of society."

"I dare say it will be good for you, Geordie—but—" Clyve gave an expressive shiver and sat down.

"Glad to see you sustain your old character, Clyve; the 'fossil' is as good a title for you now as it was six years ago, when the dear old dad put me into your hands for the final coach; and I suppose you won't move while the same stratum remains for you to lie in?"

"When do you expect to return?"

"In a couple of years."

"Then possibly the fossil will not be found in the same stratum."

"What do you mean? You don't think you're likely to die at forty, do you? I can't believe it is possible for a lawyer to die before he has completed his allotted amount of mischief. He's like a torpedo or bomb-shell. What deeds have you done? Why, I don't believe you've taken your first brief."

"Is it quite unlikely that I shall marry?"

"Perfectly."

"I don't think so."

"Are you serious, Clyve?" Thornton asked with a change in his voice from light badinage to earnest sympathy.

"Quite."

"Then with all my heart I wish you joy. It is worth coming from Hull to hear such news."

"Ah! the expedition sails from Hull. Did you come expressly to bid me good-bye?"

"Well, you know how I hate writing letters, old boy," Thornton said in the tone of apology an Englishman feels it necessary to adopt when his own good qualities are the subject of conversation.

Once more the old friends' hands met in a cordial grasp.

II.

NOTHING occurred to delay the expedition. At the appointed hour the three vessels left the English shore, amid the cheers and counter-cheers of the crews and their friends; and in a few weeks they were cut off from all communication with the civilised world. In the long dreary months that followed, Thornton experienced sufficient hardships to justify his anticipations. Nor were the moral results of physical endurance less than he expected. His mind acquired firmness and strength, and the best instincts of his heart were developed by the daily practice of self-denial and generosity in his intercourse with the men who shared with him the perils and sufferings of the undertaking.

Baffled in their first attempt to reach the Pole, the gallant party tried again and again, and only relinquished their purpose when signs of the approaching winter warned them of their fate should they remain. Their supplies were failing; the crews were weakened by disease and death, and to have lingered until the passage was closed with a barrier of ice would have been certain death for all. So after an absence of six-and-twenty months the men landed once more upon hospitable ground.

The enthusiasm with which they were met, the compliments showered upon them, were welcome at first, but Thornton soon wearied of the excessive gratulations.

"Blake," he said to his friend one morning, "there are five-and-twenty invitations to answer. I shall leave you to do it. Nature has made us men, and I for one object to society treating me as a lion. I

don't want to be stared at and watched when I'm feeding, so those dinners may be uneaten for me. These fine days can't last over the end of the month, and my soul longs for a day on the Thames with Oxford meadows on one side of me and Berkshire beeches on the other. I'm off."

And despite the remonstrances of his friend he packed a small bag, and took the mid-day train to Pangbourne.

"Now I'm safe," he said to himself, getting into a canoe. "If I see any one I know upon the bank I can't ask him to take a seat in my ship. I am safe for a good afternoon of solitude and sweet reflection—on the miseries I have escaped. Think of wearing war-paint and responding to toasts such a glorious afternoon as this! If I go into Parliament I'll introduce a bill to do away with luncheons during the sunny months."

There seemed no likelihood of his meeting any one, and he paddled along the stream taking in the beauties of the wooded hills and blue distance, in quiet gratitude to the Giver.

"One must enjoy a scene like this alone and in silence," he murmured, and then with strange inconsistency he burst forth into song, the subject of which was "solitude." He had a good, strong, bass voice, and like most men who can sing, he was pardonably vain of hearing his own voice. So he sang the song through without interruption, and then fell to thinking of solitude in its various aspects.

"I shouldn't wonder if I became a regular confirmed old bachelor, with dusty old chambers, and a quiet happy content in my little microcosm just like old Clyve. I forget though, he is a married man now, and I suppose lives in a bower cooing to his mate, instead of grinding Coke into his head in those musty old chambers. I wonder what kind of a spinster he married. I'll be bound he married her because no one else would have her. That's the old fossil's form. How he could ever bring himself to persuade a British jury to send a thief to prison I don't know. He would do it with tears in his eyes, I am sure. I can picture his wife to a hair—a figure like a Dutch doll, wearing a long-waisted dress with four or five flounces, green, and extended with a crinoline, I shouldn't wonder. A sad, simpering face, adorned with shining ringlets. Ah! I never thought of that—his unusual absence from the chambers in Pump Court! What does it imply other than a honeymoon? Oh, bliss and rapture!—dear old boy,



"SITTING ON THE GRASSY SLOPE BY THE WILLOWS" (*p.* 54).

any way I hope *he* is happy, and as to her"—here he burst again into song :—

"'Here's to the maiden of bashful fifteen ;
Here's to the 'spinster' of fifty'——

Hang the lilies!"

This last exclamation referred not to the fair sex, but to certain lily-leaves in which he had unconsciously entangled the head of his canoe. He cleared himself, and taking a course to avoid further impediment, he again lifted up his powerful voice—

"'Here's to the maiden of bashful fifteen——'"

And there he stopped, for just before him, sitting on the grassy slope by the willows, was a maiden who, if not of bashful fifteen, certainly did not exceed eighteen, and had apparently lost nothing of her bashfulness.

She had been sitting there in the fading light of that October afternoon, with her hat swinging upon her idle fingers, and her eyes following the clouds across the blue sky with dreamy listlessness, when the voice aroused her from her reverie, and drew her attention to the approaching singer. Then as their eyes met he stopped suddenly with boyish confusion in his handsome bearded face. The situation was so droll that she felt inclined to laugh. She feared he must see the difficulty with which she controlled her mirth, and so looking down, blushed to the feathery edge of her rippling brown hair.

"By George! what a lovely little maiden!" thought Geordie as he passed ; and he wished that the exigencies of paddling a canoe had not prevented his looking longer on the fair, soft face.

III.

"IF you please, sir, Sir Gregory Philipson is in the coffee-room. Here's his card, sir, as he desired I would give you the moment you came in," said the landlord of the "Swan," at which excellent inn Thornton had engaged a room.

"Sir Gregory Philipson—who on earth is he?" asked Geordie of himself, looking at the pasteboard. Being unable to evolve an answer from his inner consciousness, he opened the door and entered the coffee-room with the card in his hand.

"No doubt about the identity—a Sir Gregory every inch of him," thought he, surveying the portly form of the florid, white-haired old gentleman reading the country newspaper through his gold-rimmed eye-glass. As Thornton shut the door, the old gentleman looked up, laid down the newspaper, and rising, said—

"Mr. George Thornton, I believe?"

"That is my name."

"You have my card. May I presume to ask if you are *the* Mr. George Thornton who took part in the late Arctic Expedition?"

"Oh, goodness!" thought Thornton, as he bowed in silent acknowledgment, "is there no escape?"

"By a curious accident I happened to read your name on the—ah—portmanteau you left in the parlour."

"Confound the black bag!" mentally ejaculated Geordie.

"And being very, very greatly interested in all concerning the discovery of the North Pole, I ventured upon that knowledge to—ah—wait for you and introduce myself."

Thornton murmured some unintelligible sounds significant of pride or joy, or some such emotion which he was far from feeling, and the baronet continued—

"You will pardon me, I am sure, and give me the honour of shaking hands with one who——"

"More butter!" groaned Thornton under his breath, and closed his ears to the remainder of that sentence.

"And now I will take another liberty, my dear sir. May I ask you if you have any engagement for the remaining part of the day?"

Geordie could not tell a lie though he wished to escape. He stammered, and finally admitted that he was free.

"Then, sir, I will beg you to dine with me. My residence is not a mile distant, and I expect the trap every instant."

"But I have no tail-coat," said Thornton.

"So much the better ; I detest formality."

"And—and my boots are wet and muddy."

"Again so much the better. I can provide you with slippers and make you comfortable."

There was no escape for Thornton, so with the best grace he could command he accepted the hospitable baronet's invitation, and shortly afterwards was being carried off to "The Beeches," Sir Gregory's stronghold, as fast as the pair of ponies could go.

The baronet was not without visitors. Thornton, after being presented to the baronet's wife, was introduced to Mr. John Hamilton—"R.A.," Sir Gregory added in an undertone. "Another poor lion," thought Thornton—and then to Mrs. Hamilton and two little Hamiltons, and when these formalities were ended the baronet looked round the room and asked—

"Where is your sister, Hamilton? Where is our Margaret?"

"She went off alone to the meadow," answered Mrs. Hamilton ; and then added as she looked through the window into the garden, "Here she comes."

The next moment Margaret entered the room by the open window, and being in her turn presented to Mr. Thornton, the two blushed once more ; for, strangely enough, Miss Hamilton was the very young lady Thornton had seen sitting under the willows beside the river an hour before.

IV.

JOHN HAMILTON was an artist who had gained a high position, but not without struggling against difficulties which would have overcome a less indefatigable worker than he. He had brought his family into Berkshire that they might be near him while he worked among the gloriously tinted hills, and being discovered by the eccentric old baronet, was compelled to accept his invitation and make a residence of The Beeches so long as he stayed in Berkshire. There

was no escaping the hospitality of Sir Gregory. His pleasure in receiving friends and his pain in losing them were both so palpable, that it seemed but a proper return for one act of hospitality to accept another, and so those who came to The Beeches generally stayed.

In accordance with this rule Thornton accepted a couple of rooms, and wrote to London for supplies of linen and other requisites. He had an easy way of accommodating himself to circumstances at all times, but the surroundings here were so agreeable that one less difficult to please might have accepted them without difficulty. He liked Sir Gregory—when he had run over the gamut of compliment several times and ceased to flatter; he liked Hamilton, and—he loved Margaret. He settled that in his own mind the very first day of their companionship, and altered his views entirely as to his fitness for bachelorhood. "Margaret is the sweetest, most innocent, tenderest little flower in the whole bouquet of women, and it is a ridiculous thing for a man to live alone when he has the chance of making such a soul as Margaret's part of his existence. A bachelor smokes too much; he grows selfish and misanthropic; he is altogether a mistake." Thus he thought.

He was thrown much into the society of the young girl. Mrs. Hamilton had her children to attend to, Hamilton was engaged in work from sunrise to sunset, and the baronet, with his customary benevolence, seeing these two young people of a marriageable age and condition, did nothing to interrupt a current of events which might flow towards a tranquil lake of happiness for two individuals whom he admired and loved. This was not an ordinary state of things, it must be admitted, but it is not from every-day occurrences that the little romances of life are gleaned.

Margaret having lived from childhood with her brother, and been constantly meeting artists in his studio, saw nothing *outré* in associating closely with Mr. Thornton. She was quite without suspicion of the result this association might produce. She liked taking long walks, but that she could not do alone; she liked scrambling up steep hill-sides among the crisp, odorous, fallen leaves, but it was impossible to scramble without a strong hand to help and guide her. It was the consciousness of his strength and her need that first awoke her love. She half doubted the feeling at first, she tried to deceive herself and think it was merely such friendship as she had felt for her brother's friends; she tried not to like him so well, to find faults in him when he was with her, and to forget him when they were separated. And when she found it impossible to evade the honest truth she was sad. It is not with an awful sense of guilt, with an aching heart, with a desperate struggle to subdue the gentle beating of her heart, that a young girl usually discovers that she loves one man better than all the world. Yet it was so that Margaret Hamilton regarded her feeling for George Thornton.

"I cannot help it," she cried, sitting upon her bedside at night, with her fingers knitted and white with convulsive pressure.

But one thing she could avoid, and did—the encouragement of this new yearning in her heart. She refused to go out for walks and scrambles, pleading headache and fatigue. Indeed, her pallor and the pained expression of her features justified the assertion to casual observers. Thornton's eyes, more powerful with love, saw beneath the surface, however, and he was perplexed.

"It is not a little thing that troubles that dear young soul," he said.

Seeing the young people separated after a week of close companionship the baronet was ill-pleased, and by subtle artifice contrived to leave them together one afternoon when Margaret had consented to walk through the woods with him and Thornton. For a while Geordie walked silently beside her, then suddenly he said—

"Margaret, I am a fellow unused to keeping secrets, and I must tell you what is on my mind now, come what will. Margaret, dear little Margaret, I love you, and if you will be my wife I will try to make you as happy as you make me."

"Oh, no, no! do not speak of that. I am a naughty girl to let you see that—that——"

"That what, dear one?"

"Oh, let me go! do not take my hand. Let us find Sir Gregory."

"No, I must hold you thus one moment — one moment while you answer me a question—yes, or no. Do you love me?"

The girl looked him in the face for a moment, her whole soul filling her eyes with tenderest regard, and then snatching her hand from his she covered her blushing face with her hands, and ran away, sobbing as she went.

Thornton followed her slowly until she was safe within the meadows of The Beeches, and then he walked straight away to Hamilton, who was working up the river, and told him the whole story.

"What a careless beggar I am!" said Hamilton, laying down his brush as Thornton finished, "I never thought there was any feeling between you. I am so accustomed to her talking and chatting with the fellows who come to the studio, and then when I am at work I forget everything else. And besides I never doubted that Margaret——"

"There is no necessity for apology. Nothing has happened which should not happen to a young girl. She must marry, and I hope I am not altogether objectionable."

"It isn't that, but—but the poor child—she is engaged!" groaned Hamilton.

"Engaged! No one has mentioned the fact; I have seen no one here."

"She has been engaged two years. We don't see him often—three or four times a year. It is a most prosaic affair—not a love-match at all on Margaret's side—but we fancied that she was not capable of showing any decided feeling, and we knew the match would be to her advantage. I will tell you exactly how it happened: I was in great difficulties a couple of years ago, and had to defend a lawsuit. Thanks to my

counsel I won the day, and by his generous interest in my affairs I was placed in a better position than I had ever before possessed. This interest was due, I believe, to his love for Margaret—then only sixteen; and when he proposed to marry her, the child herself willingly accepted. She knew how much we all owed Clyve."

"Clyve?"

"Geoffrey Clyve. Is it possible you know him?"

"He is my dearest friend," murmured Thornton, dropping his head.

V.

THORNTON left The Beeches at once, only giving an indefinite answer to Sir Gregory's pressing invitation to renew his visit.

"You must promise to come at Christmas if not before. The Hamiltons have agreed to be with me at that time, and our party would be incomplete without you," said Sir Gregory.

"If it is possible," was the only answer Thornton would make; and he knew perfectly well that for him, alas! it would not be possible.

So Margaret was alone again, and the little romance of a fortnight was over. It seemed to her as if all the happiness of life was ended too. The date of her marriage was fixed for the spring, and her brother and his wife hoped that by that time she would have forgotten Thornton, and resumed her quiet passive tone of thought. They did not know the depth of the girl's nature, or how passionate the love of such a girl when once awakened could be. She could not forget the past, she could not think of the future without horror, and time only increased the intensity of her emotions.

A letter came from Geoffrey Clyve. He had broken his leg in a fall upon the mountains, and was under the doctor's hands at Constance, where he should have to stay for a time; but he trusted to be well by December, that he might spend Christmas with his friends and his little wife.

Margaret had scarcely strength to read the letter through. She sank into a chair, and sat trembling like one in the extreme of terror; and when her brother spoke some words of kindness to her, she threw herself into his arms, and cried like a little child.

"I must write to him and tell him all. He must not marry me thinking I am the good little girl I was," she said, when her tears were shed.

"You have done nothing wrong, Daisy," said her brother gently.

"Oh, but I should not have allowed myself to like any one else!"

Poor child! as if she could help it!

So she wrote to Geoffrey Clyve, telling him how sorry she was that he had hurt himself, and promising to be ready to marry him in the spring if he would have her; but that she was not so simple and innocent as when he offered her his hand.

His reply did not come till Christmas Eve, and then it was forwarded to Margaret, who, with the family, had gone into Berkshire, and were assembled once more under Sir Gregory's hospitable roof. Margaret read the letter.

"Constance.

"MY DEAR MARGARET,—"I have read your touching confession, and I love you more now than ever. I must keep you to your promise: you must marry and be happy. Almost as soon as this arrives your husband will claim you. God bless you in this season of joy, and make your life happy always.

"Yours affectionately,

"GEOFFREY CLYVE."

She handed the letter to her brother, and sat still with a beating heart. She felt already as if Geoffrey were at the door.

They were in the library waiting for the announcement of dinner when a sharp knock was heard at the hall door. Sir Gregory was busy showing the wondrous works of his watch to little Ethel—Hamilton's youngest child—and scarcely noticed the sound, but every one else knew who came, and looked anxiously towards the door. A step approached, and Mrs. Hamilton moved to open it. Poor Margaret rose from her chair, putting her hand upon her side unconsciously, as if to repress the beating of her agitated heart. The door opened, and in walked—George Thornton.

* * * * * *

"Why, you didn't think dear old Clyve would be such a brute as to marry a little girl who couldn't love him, did you?" asked Geordie, when their surprise and embarrassment were explained. "I found out where he was, and went to him, and before your letter came to him he had renounced his faithless Margaret. And I am the husband he has sent to claim you, you dear little Margaret."

WHAT TO WEAR.

CHIT-CHAT ON DRESS. BY OUR PARIS CORRESPONDENT.

WITH December comes a certain amount of decision as to fashions for winter wear; we begin to see not only what the milliners, dressmakers, and shops have provided, but what the public have bought or are most inclined to buy, and what style, amid an unusually large number in dressmaking, is the prevailing one. Plush has been adopted with enthusiasm; we have plush bodices, entire dresses of plush, plush trimmings, plush bonnets and hats, and, newer than all, plush shoes, the plush in this case being closely woven, like velvet.

We are wearing such a profusion of machine-made laces that Calais is busy on this side of the Channel,

and Nottingham on yours. The knowledge of real lace is not very great among the manufacturers; that fairy web Queen Mab might wear, yet designed to last for ever, has been copied roughly, but effectively. The names given to modern reproductions are vague enough, and do not often at all recall the old models. The Point d'Alençon of the past was made of linen thread with raised ornaments, but this year's has vandyked edges and running patterns. Fine Torchon was formerly called Mirecourt, now the term applies to a large pattern in thread, the design copied from blondes. The Mechlin order of laces, however, finds most favour, and the Vermicelli, the pattern in which is outlined with coarse threads. The finest make of Valenciennes has been imitated, and the finest makes of Point Raguse and Breton are still used.

The new ruffles are box-plaited in double rows, turning downwards from the neck, but plush collars are prepared edged with lace, and plush hoods and collars with revers in front are fashionably worn in the evening, while for morning the large square and round collars reaching to the shoulders have come in again, made of Irish linen, with broad hems edged with lace, and also of closely-tucked muslin. A large lace bow and Steinkirk tie make a dressy finish to the front of a dress, and much style is thereby imparted to a toilette. For dinner, large collars are worn of muslin edged with lace, and forming ends and cascades of lace in front, almost covering the bodice. For young girls I would recommend the new fronts of bodices, which can be pinned on in a moment. They are made of soft silk of two colours, say blue and old gold; the upper portion is full and drawn, the lower coming to a point is laced across with cord, the whole outlined



with a band of silk. A dark dress is made dressy at once by these contrivances.

A mantle is rather a heavy investment this winter, for the most fashionable are brocaded velvet or satin loaded with trimming—jet, chenille, plush, feathers, and such fur as skunk, unplucked beaver, black fox, and raccoon. The Directoires and long visites are the prevailing shapes, but those curious surplice cloaks which came out last summer are likely to be very general. They are gathered round the neck like a surplice, standing up unbecomingly above the shoulders. They have very short sleeves, and fall loosely about the figure. Heavy jet and passementerie trimmings, costing two or three pounds, are placed down the back of many of the Dolmans, and broad galons and fringes of chenille beads and crimped silk border them, these trimmings being so made that when put on the front, the chenille and silk fall *en cascade*. Black and steel is the best new mixture in beads. Besides the plush and imitation sealskin trimmings, the Parisians have brought out some Duvet or down bands, which look just like fur, and are feathers; the so-called Chinchilla has the smoothest and most close-set surface, mottled all over; while the Marabout, in black and brown, is soft, yet warm, fine, and light. Tailor-made jackets continue to be worn, and plush-lined hoods appear on ulsters and jackets as well as satin hoods, a flower painted on the satin in the centre, such as lilies on old gold or marguerites on cardinal. Stockingnette jackets are very well worn this winter, and a new kind has a fluffy interwoven lining; they have two great merits—they are warm, and they show off the figure to advantage. Some charming pelisses are now being extensively patronised in Paris, made of a thick cloth felted on one side; cords appear on them, as indeed they do on most French mantles. They are sewn on double from the shoulder to the waist, and from the waist to the edge of the mantle, or the cords cross the chest *en militaire*. Frenchwomen, who make dress a study, select the richest brocades of the largest patterns for this winter's cloaks, and choose either the visite or Directoire form, both of which show off the cut velvet and chenille designs to perfection. Such mantles are bordered with curled feathers as well as with jet, chenille, and fur, and are slightly wadded, but always lined with a bright colour.





I was reading in an English paper the other day a suggestion that a flat wallet-shaped pocket should be sewn into the petticoat, and that there should be a placket-hole in the dress only, and the idea is worth consideration, for pickpockets have their work made rather too easy for them in the present day. Distinct pockets from the dress, like the old reticule of our grandmothers, are very fashionable just now. They can be made in velvet, plush, or satin, to go with any dress; black are those generally used, beaded all over, and attached to two beaded bands fastened to the waist. There are two favourite shapes, one semi-circular, one straight and gathered at the upper and lower edges.

Gauze veils are good things for the complexion, and delightfully warm, but I fear no one could praise their beauty; this winter, however, they are made in all colours with spots, which is a great improvement, and tufted gossamers, with large prominent spots, make really pretty cap and bonnet trimmings.

There is nothing very new in children's fashions. The Princesse is the foundation of most of the white frocks for very young ones, the variety lying chiefly in the puffed fronts and sashes. Older girls have kilt-plaited skirts and tunics, and Norfolk jackets or full bodices. Fur is much used for trimming the frocks, as well as the paletots; the latter descend quite to the hem of the little dress.



Some of the new ulsters have a kilt-plaiting round the edge, and a cape on the shoulders; and ulsters are worn as the general out-door covering for little girls.

There is plenty of choice in children's head-dresses. There

are beaver Tam o' Shanters and plush "Granny" bonnets, with close cap fronts, Dame Trot bonnets with high pointed crowns, and toques large and small, but plush suits this last style best.

Black Madras muslin has been brought out this year. I think it has nothing to commend it, as far as good taste is concerned. The manufacture is the same as the ecru, which had so great a run last year, but the groundwork is black, the pattern old gold, and it looks only fit for window-curtains.

Tea-gowns are becoming the general home dinner-gowns. Many are made as a loose Princesse dress in plush, the front breadth all lace (one row upon another); others have a short skirt and long loose jacket, both trimmed with deep gatherings of silk, but nearly all have hoods or simulated hoods at the back. I will describe one of these dresses more minutely, in order that it may be a guide in making:—A Princesse back, with six seams, walking length, cut out round the edge in battlements, the corners turned back beneath buttons; the front loose, with a distinct front breadth of a contrasting colour gathered at intervals of eight inches, so that the fulness hangs over a little; the side breadths fasten on to this. Beneath the battlemented pieces round the skirt is a crossway frilling to match the front; the hood, lined with the same, is fastened to the back; and the sleeves, cut up on the outside of the arm, show a little more satin. Brown and gold, black and cardinal, are very good mixtures.

Crinolines are slowly creeping in. At present the back is kept out with small crinolettes, made of steel or crinoline proper—viz., a sort of woven horsehair. Nothing very new has come to the fore; but for long dresses, a piece of muslin cut the size of the back breadth, with plaited flounces carried to the waist, seems the most successful plan for giving just the necessary flow, and preventing the back breadth clinging too much.

Under-linen remains the same. Washing-silk is worn by those who can afford it and prefer it. The night-gowns have either large plain collars, edged with lace, or very full and wide ruffles down the front, and the trimming is often carried the entire length to the hem. The newest combination garments are made high to the throat, with long sleeves, and are comfortable wear for winter.

Painting is being turned to advantage. Gloves are painted at the back of the hand to match the flowers worn, and children's pelisses are trimmed with bands of satin painted in oils, which will bear washing. Cream is the best background, and on this yellow roses, jessamine, and similar flowers show to advantage. I have seen one or two plush pelisses and several cream-coloured Indian cashmere ornamented in this way. We are to abjure buttons on gloves as much as possible. Comfortable, warm cashmere gloves are made to slip over the hand, with a length equal to four buttons; and white and almond-coloured kid gloves, intended to be wrinkled on the arm, as long as a 14-buttoned glove, are made shapely by two buttons only at the wrist. Ladies no longer wear gloves to match their dresses in the evening; they have the choice of white, black, or almond colour, and I consider that it falls generally on the last. Embroidered gloves never made much way except for fancy dresses, but painted ones are promised a success. I have seen many with sprays completely covering the back of the arm and hand, painted to match the floral trimming on the dress. This is quite fit work for amateurs, but requires care, and the paint takes a long time to dry, or it cracks when stretched. The lace borders and insertions, above the wrist, are still worn; and I notice that with black as well as light shades in kid and Suède gloves the preference is given to white lace.

Self-coloured stockings, often with open work, are fashionable; stripes have not as yet appeared on them, nor checks, but a little embroidery. An English firm is making a specialty of the Botany Bay wool, and the stockings made of it are warm, light, and durable.

Serge and tailor-made dresses continue to be most generally worn in England by the best-dressed people in country houses, but the ladies' tailors who have the reputation for good fit and style have not introduced any great novelties this year. Some of the prettiest of their dresses consist of a dark blue jersey, with red sleeves, a dark blue skirt, made with kilting, and a red foot-kilting at the extreme edge; for jerseys well arranged are still worn, but between the jersey put on anyhow and one well cut and fitted there is a wide difference. Some of the tailors make bodices to simulate jerseys, the front, as well as the collar and cuffs, richly braided, a full braided drapery falling over one deep kilting forming the skirt. Yoke bodices appear on serge dresses, elaborately braided, a band round the waist, and two kiltings on the skirt, as well as a long braided tunic. Surah silk scarves are introduced on to some of the serges, and the well-known make always to be seen at the Isle of Wight holds good still: viz., a jacket bodice braided *en militaire*, with kilted skirt and tunic, a Princesse dress, richly braided down the front over red, and also on the side drapery, collars, and cuffs. In Paris many of the bodices have embroidered collars and cuffs, wrought in gold, and are called officers' and prefects' collars. Being stiff and high, they have the appearance of supporting the throat.

The four evening dresses intended to be worn at quiet dinners and soirées, and here engraved in a group, will best illustrate the current styles for winter demi-toilettes.

The seated figure wears a crevette or pink satin dress, with claret plush trimmings; a broché bodice and train, the design of the broché being claret chenille leaves scattered over a crevette satin ground. The bodice is laced across a full satin plastron with silken cord. The frill round the neck is claret plush, with lace inside. The bows on the sleeves and on the sides of the skirt are plush. The tablier is cased or gathered at the top, and the white lace that edges the flounces falls on dark plush. The train is prettily finished round the edge with a satin coquillé,

lined with plush. For a youthful married woman this would prove a most successful toilette.

There is much that is new in the style of dress worn by the standing figure who is holding up some tapestry for inspection. The seal-brown plush bodice and train, the large point-lace collar, the folded satin waist-belt, the folded satin tablier with *flot* bows of the two materials, and the rich lace that is turned back on the train, the dark background showing off its design to advantage, all help to make up very picturesque attire.

The young lady who is looking at the tapestry wears the popular demi-toilette of the season—namely, a broché bodice, and a skirt that may be velvet, or gauze, or barège, or any of the intermediate materials, such as satin or faille. The model is blue broché, well covered with red and gold flowers; the skirt is blue velvet and satin, with red and blue bows. The Medici collar has a lace ruche inside. The last figure in the group illustrates a toilette of pale heliotrope and violet satin, made with much casing or gathering, white lace and *flot* bows. For a slight woman this is an exceedingly pretty dress. The three single figures in outline are all attired for walking. There is a young lady in an ulster of heather tweed, with a plush-lined hood, and a plush Tam o' Shanter cap—the inevitable Scotch bonnet widely patronised in England. A little girl of six, in a dark green foulé frock, with crimson satin gathered front, and a crimson and green plush bonnet, forms the second subject. And, lastly, there is a black velvet walking-dress, with a peep of crimson plush at the foot of the skirt, and a glimpse in the linings of the drapery and in the hood; jet agrafes and chenille and jet fringe make up the rest of the trimming to an exceptionally handsome winter costume.

THE GATHERER.

A Chemical Lung.

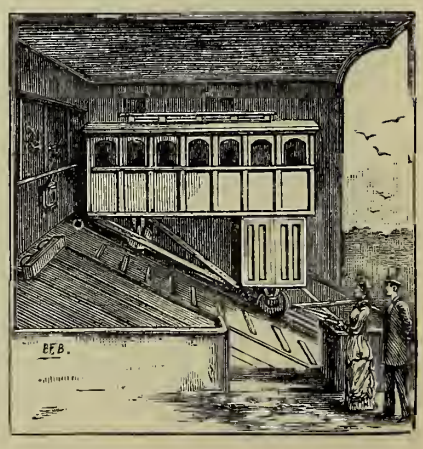
Most of the plans hitherto proposed for ventilating public halls, theatres, churches, tunnels, and other close places have involved the expulsion of the foul air and the admission of fresh to supply its place; but Dr. Richard Neale has ventured to call in the aid of chemistry for the purification of the air already contained in the building. His idea is, in fact, to make a kind of "chemical lung," which will effectually absorb the carbonic acid and sulphurous gases which are given off by living persons and artificial lights. Dr. Neale is of opinion that the noxious fumes which render the London Underground Railway so disagreeable to travel by, might be abolished by a process of this kind. In proof of it he exhibits the following experiment:—Sulphurous acid and water are mixed in a flask to imitate the air in the Metropolitan tunnels, and a small quantity of caustic soda in solution is added. On agitating the flask for a few seconds, the sulphurous smell is charmed away. Again, if into the same flask a current of carbonic acid is passed until it is so strong as to extinguish a lighted taper, a few shakings of the flask will be sufficient to allow the soda to absorb so much of the gas that on reintroducing the taper it will burn brightly. To apply this process to the Underground Railway, Dr. Neale proposes that each train should have its locomotive fitted with a tank containing a strong solution of caustic lime, or soda, through which the smoke could be made to pass before being discharged into the atmosphere of the tunnel. In this way the carbonic acid gas and sulphur could be eliminated. Further, there might be a special truck attached to the train, open at both ends and containing inside flat trays of the same absorbent substances. The plan is certainly worthy of trial, and objection cannot easily be urged against it on the score of cost.

Refuge Caves for Miners.

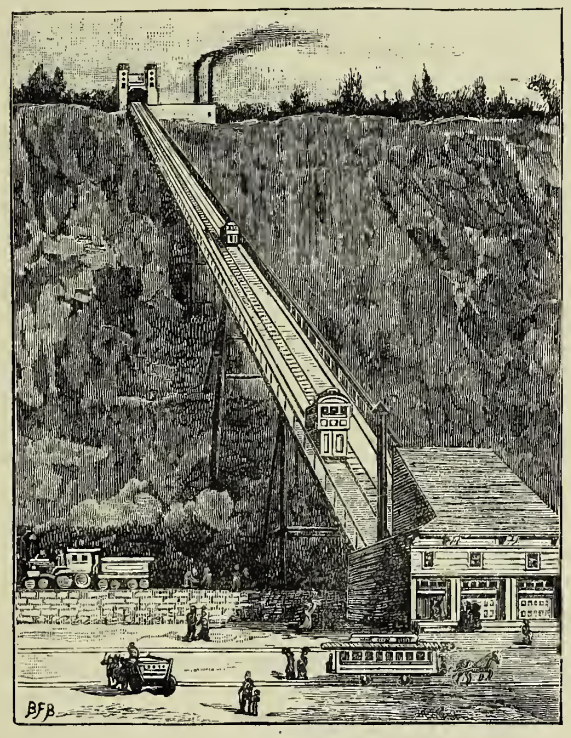
The disastrous explosions which every now and then occur have suggested to Mr. Latimer Clark, C.E., the advisability of providing caves of refuge down in the galleries of all coal-mines, to which the colliers might flee for safety either before or after a catastrophe. Each cave would be closed by a tight-fitting door, to keep out the foul gases of the drift it was annexed to; and air-pipes for the supply of fresh air would communicate with the surface. There the imprisoned miners by the help of a stock of biscuits, water, and candles, could live tranquilly until the relieving party arrived.

A Steep Railway.

In certain parts of the United States the growth of towns has been so rapid that, in several instances, natural features — such as hills, or even mountains—at one time regarded as beyond the sphere of



occupation have in a short period been covered with a dense mass of inhabitants. The spectacle of a town with a steep hill in perhaps its busiest quarter, though unusual, presents some disadvantages, but with their characteristic enterprise our "American cousins" have faced engineering difficulties of the gravest description and triumphantly overcome them all. It is now becoming customary, in the special circumstances alluded to, to lay down a railway for the purpose of climbing the hills, and a glance at the accompanying wood-cut will explain how the ascent is effected. This view represents the line belonging to the Duquesne Incline Plane Company, at Pittsburg, Pa., and having for its object the surmounting of the hill known as Mount Washington, which overlooks the site of the historical fortress that played so prominent a part in the years preceding the Declaration of Independence. The perpendicular height reached by the line is 400 feet, the length of incline is 703 feet, and the rate of ascent is 30½ degrees. The roadway consists of a double line, one car ascending while its companion descends, and *vice versâ*. The motive-power is a double engine of 70 horse-power, situated at the top of the incline. Motion is communicated to the cars by a large drum carrying steel wire cables of 1¼ inch diameter. A safety cable of 1⅛ inch diameter is also constantly used. Each cable is 900 feet long and able to bear a perpendicular strain of 50 tons, the working strain, however, amounting to only one-fifth of that quantity. Should the driving cable break, the safety cable is at once tightened by special appliances and the cars are stopped. The cars accommodate twenty-five passengers, and the security of this mode of climbing hills, although apparently not unattended by danger, may at once be inferred from the fact that though 500,000 persons have already patronised the line not one individual has been injured.



A STEEP RAILWAY.

Making Paper Waterproof.

The following is a new German method for making paper waterproof:—To a weak solution of ordinary glue add a little acetic acid; then make another solution by dissolving a small quantity of bichromate of potash in distilled water. Mix these two liquids well together, and then draw the sheets of paper to be made waterproof through the mixture. After this it is only necessary to hang up the sheets to dry. As regards the proportions of the chemicals, about 5 per cent. of acetic acid and 7 per cent. of saturated solution of bichromate of potash will answer very well.

A New Dye from Poplar-Wood.

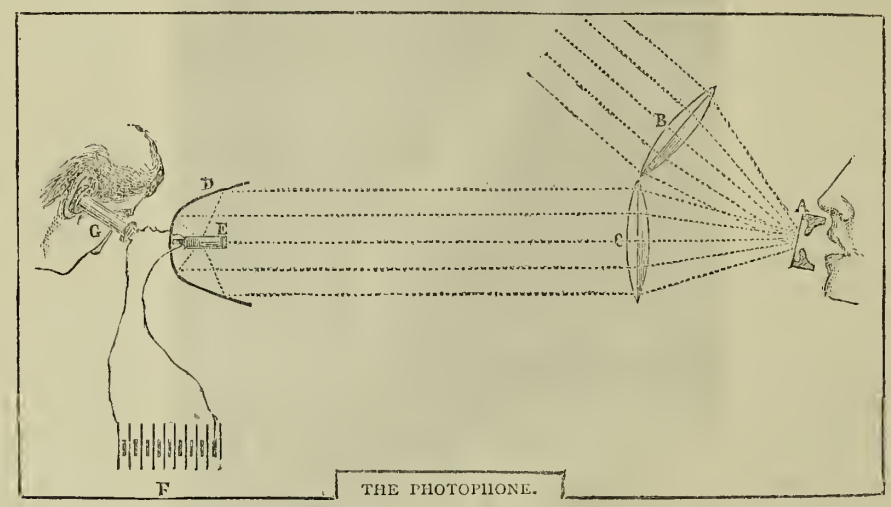
A fine golden-yellow dye, which has received the name of "Ericine," is now made in America from the young wood of poplar-trees. The shoots and twigs of poplar are cut off and crushed, then boiled in alum-water, in the proportion of ten pounds of wood to one pound of alum and three gallons of water. The boiling occupies about half an hour, the liquor is then filtered off. In the act of cooling it clears and thickens, throwing down a greenish-yellow deposit of resinous matter. When sufficiently clear the liquor is again filtered, and then left exposed to the air for three or four days more, according to the state of the weather. Under the action of the light and air, it quickly oxidises and assumes a rich golden tint. In this condition it can be used for dyeing all kinds of fabrics. To give yellow and orange-yellow shades, it is used by itself; but for green it is mixed with Prussian blue, for brown and tan it is mixed with oak-bark, and for scarlet and orange tints it is blended with cochineal. For wall-papers and hangings it makes a warm and quite innocuous yellow colour.

Lightning Photographs.

The duration of a lightning-flash was estimated by Sir Charles Wheatstone to be less than a millionth of a second, and hence it is that the extraordinary sensitiveness of photographic plates to light impressions is indirectly demonstrated by the photographs recently taken by Mr. R. Crome, of Liverpool, by means of the lightning-flash. Some of the flashes were rendered on the gelatine plates employed with very great definiteness, but the surrounding objects illuminated by the discharge were rather feebly displayed. Mr. Crome concludes therefrom that, though the rays of the lightning-flash are very active, there is not an adequate volume of light to illuminate a landscape with sufficient clearness to allow of a successful photograph of it being taken; but perhaps if still more sensitive plates were employed, better results would follow.

The Photophone.

Some of our readers may have heard that Professor Graham Bell, the well-known inventor of the speaking telephone, had deposited a sealed packet with the Franklin Institute of America, containing an account of a new discovery by him, which was thought to bear upon the problem of transmitting light along a wire to a distant place by means of electricity. At the late meeting of the American Association for the Advancement of Science, this communication was made public by Professor Bell, and though it does not show how images can be transmitted by telegraph as was expected, it nevertheless divulges a very interesting discovery, which may be regarded as a step towards the invention of a veritable telephote, or light telegraph. This is nothing less than the transmission of telephonic messages, both in music and speech, along a beam of light in lieu of a metal wire. By the heliograph a series of light signals can be flashed for a distance of 100 miles or more in a clear atmosphere such as that of Algeria or Afghanistan ; each flash of the light constituting an element in the letter signalled. But Professor Bell, by an ingenious refinement of the heliographic process, has succeeded in transmitting not merely crude mechanical signals, but all the vibrations of the human speech. This he has done by means of the speaking telephone, and the property possessed by selenium of varying in its electrical conditions under the influence of light. This much being premised, we may now turn to the figure which represents the arrangement of apparatus termed the "photophone."



THE PHOTOPHONE.

On the right is the transmitter of the sounds to be despatched, whether vocal or instrumental, and on the left is the receiver. The transmitter consists of a vibrating diaphragm, A, fitted with a mouthpiece, and similar to the plate of a speaking telephone. A beam of light from any source sufficiently bright is concentrated on the diaphragm, A, by the lens, B, and the diaphragm, which is silvered so as to reflect the light, is placed in such a position relative to the lens, B, as to project the light along a line joining the axis of another lens, C, and the axis of a parabolic reflector, D, placed at the distant station, and forming part of the receiving apparatus there. The object of the lens, C, is to render the divergent rays proceeding from the diaphragm parallel, in order that when they strike the interior of the reflector, D, they shall be again reflected to a single focus, wherein is placed a small selenium cell, E, which is electrically sensitive to light. This selenium cell is connected in the circuit of a voltaic battery, E, and a speaking telephone, G. If, now, a person speaks or makes a sound into the mouthpiece of the transmitting apparatus, the vibrations of the diaphragm, A, will undulate the beam of light thrown from it, and these undulations travelling along the parallel beam to the reflector at the receiving station, will be directed upon the selenium cell through which the electric current from the battery is flowing. The consequence will be that they will vary the internal resistance of the selenium to the passage of the current, and in this way modify the strength of the current flowing through the telephone. In short, the current in the telephone will ebb and flow in sympathy with the waves of light, that is to say, with the vibrations of the diaphragm, hence it follows that the sounds heard in the receiving telephone are an imitation of those uttered at the transmitter.

About fifty different forms of photophone have been devised by Professor Bell, but these are simply modifications of that described. The extreme distance through which the instrument will work successfully has not yet been determined, but it is believed that it will be limited only by the difficulty of adjusting the instruments at widely different stations, and the penetrative power of light. Musical sounds can, of course, be transmitted with equal facility ; and a system of audible telegraphic signals could be sent, which might be interpreted according to the well-known Morse code.

Cinchona in Bengal.

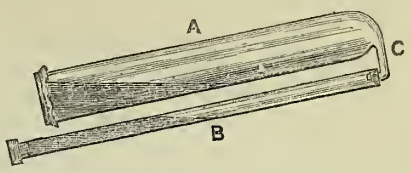
Quinine, the tonic principle of cinchona bark, is one of the most valuable remedies known, and it is grati-

fying to learn that it has been successfully acclimatised in India. The Bengal plantations are now paying handsomely. During the past year, about a million young trees have been planted, and nearly 400,000 lbs. of bark have been collected. A large portion of this yield has been sent to London, for sale and manufacture into quinine; but the greater part has been made use of in the Government hospitals and dispensaries throughout India. Not only is the Government enterprise a commercial success, but inasmuch as it renders the market less dependent upon the forests of South America for this precious drug, it is likewise a benefit to the world at large.

New Sea-Sounders.

Sir William Thomson has of late years given his great abilities chiefly to the improvement of the means of navigation. His patent compass is now being fitted on all the best steamers, including the Czar's yacht, *Livadia*, and his wire sounding apparatus for ascertaining the depth of the sea is also in request, especially for ships engaged in laying submarine cables, and mail steamers approaching dangerous coasts. Its great merit consists in the rapidity with which a sounding can be taken, owing to the small resistance offered by a wire compared to a hemp rope in being pulled aboard after the sounding-lead attached to it has reached the bottom. By its means "flying" soundings can be readily taken while the ship is going at full speed. It is a great advantage for rapid soundings to have a gauge which will of itself tell the depth without reckoning the length of wire paid out, for that is greatly in excess of the actual depth; and Sir William Thomson has devised two different gauges. One consists in sinking along with the lead a very fine capillary tube of glass coated internally with chromate of silver. The tube is open at its lower end for the sea-water to enter and rise in the bore. As it rises it discolours the internal coating, changing the yellow chromate into white chloride of silver. The height to which it rises is, of course, proportional to the pressure, and the extent of discolouration is therefore a measure of the depth. A simpler gauge has, however, been quite recently invented by Sir William. As shown in the figure, it consists of two glass tubes, A and B, one wide and the other narrow, connected by a cross capillary tube, C. The open mouth of A is covered with a cotton cloth, and that of B by a plug. When the tubes are lowered with the lead into the sea, the water forces its way through the cloth in the tube, A, and thence through the capillary passage, C, into the narrow tube, B. The quantity forced through the capillary into B, is proportional to the pressure, and hence to the depth. It is indicated by graduations on the tube, B, which are thus a measure of the depth. As the gauge is drawn to the surface, the air in it expels all the water remaining in the wider tube, A, but that in B remains there until it is let off by taking out the plug. To protect so fragile a contrivance from damage, it is enclosed in a suitable iron case perforated with holes to admit the sea.

While upon the subject we may also mention the new "nipper-lead" of Mr. Lucas, for bringing up



specimens of the sea-bottom. It is simply an ordinary lead, fitted with two hollow nipper-blades or spoons, kept apart against a strong spring by a locking bar. The shock of the open spoons striking the bottom unlocks the bar, and the spoons close together, clipping up at the same time a portion of the bottom, which they retain in their clutch until hauled to the surface for inspection. So effective is the nipper-lead, that it will snatch up a sheet of paper from a flat table.

The Telephone in Mines.

An interesting and highly useful application of the telephone has recently been successfully carried out in connection with the ironstone mines of Messrs. Stevenson, Jaques, and Co. at Boosbeck, in the North of England. The mines have been placed in telephonic communication with the smelting furnaces at Acklam, fifteen miles distant. This, however, is but "half of the story." The wires having to pass through the company's offices at Middlesborough, a set of telephones has been put up there, and so the three places have been brought within speaking distance of each other. Orders and the like conveyed from the central office can be most distinctly heard at either or both branches, the speaking being transmitted by a patent micro-telephone, which entirely overcomes the effects of induction from contiguous telegraph-wires. Besides establishing communication between Acklam, Middlesborough, and Boosbeck, the enterprising manager has carried a wire into the mine itself, so that it is possible for people in the furnaces or in the offices to speak direct to the men at work in the mine. This is certainly a notable achievement.

Cooking Burners.

Mr. Thomas Fletcher, F.C.S., is well known as the inventor of a great variety of ingenious heating appliances, such as gas furnaces, cooking stoves, and burners for chemical and domestic use. His "Solid-flame Gas Cooking Burner" is illustrated in Fig. 1. It consists of a tap for conveying the gas to the burner, a perforated copper dome for the flame, and three supports for the pot or pan to rest upon. It is stout and not readily injured, being designed to stand the roughest work. The flame is quite solid, and free from smell, so that it does not taint the viands in process of cooking. As regards its capabilities, it will boil an egg, cook a chop, bake a round of beef in a sheet-iron oven, or even (if desired) melt half a hundredweight of lead in an iron pot. Only six minutes is required by it to boil a

quart of water in a flat copper kettle. Mr. Fletcher also arranges two or more of these burners on a "boiling bench," so as to heat or cook upon a larger scale. Fig. 2 represents his "Instantaneous Water Heater," for use in sculleries, lavatories, and bath-rooms. The cold water flows into the heater by the upper pipe, as shown, and issues by the lower pipe as hot water. The ordinary pattern is made to hang against the wall, but it can also be mounted on a tripod. There are several sizes made—from one

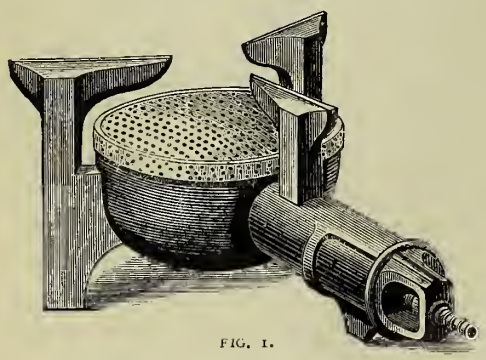


FIG. 1.

giving a pint of hot water per minute to one giving a gallon and a half every minute. All of these supply pure water fit for cooking, either boiling or at lower temperatures, almost immediately after lighting the gas. Mr. Fletcher is also the originator of a simple and convenient "Triple Gas Oven," which can be fully heated in less than a minute. One 12 by 14 inches in the bottom is sufficient for the service of an ordinary family, and costs on an average one penny for two and a half to three hours' work. The lower compartment of the oven is used for roasting joints, &c.; the upper compartment for puddings and pastry, &c.; while the space underneath the oven can be utilised for roasting potatoes or apples, or toasting bread; and the space on the top for heating plates, &c.

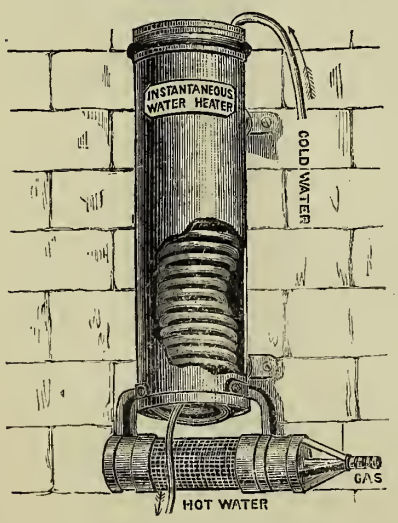


FIG. 2.

The gas is burnt below, and the heated fumes are carried round the food in an iron flue, so that they do not in any way contaminate the latter.

Prize Double Acrostics.

(Being the set of Six Double Acrostics for which the Prize of Five Pounds has been awarded.)

I.

SWEETEST flower of purity,
Whiter than the driven snow;
The drink the gods might joy to see
In their feastings here below;
Rolling river, calm and wide,
Icy waters pouring forth
In a full unceasing tide
To the ocean of the north.
Norman fear-inspiring king;
Tenant of the forest wild;
He whose death could Scotland bring,
Though he was Italia's child;
Island of refreshment, where
Sandy billows beat the coast;
And the flower the spring doth bear
Where the first sun shineth most.
Give their names and you shall see
What the two sweet flowers may be;
This the foremost letters give,
That will in the finals live.

II.

Within a shaded avenue
Close by a babbling brook,
I saw a youthful maiden sweet
Sit reading from a book.
It was a time of springtide joy,
I heard her name its name,
And then a word that meant that she
Would ever be the same.
(Inscribed it was on locket fair
In characters of gold,
Fit emblem of a faithful heart
Of such angelic mould!)
Far off the tall cathedral towers
Of a northern town were seen,
And my fancy strayed to a river sweet
Where my wandering feet had been;
But, as I mused, an Indian prince
With loving speech drew near,
And the maid at length became his bride
At a town in Lincolnshire.

The names of two old English towns
In these seven words we see;
The initial letters give the first,
The next in the last will be.

W. M. ADAMS.

(To be continued.)

DOUBLE ACROSTIC COMPETITION.

We are at length able to announce that the prize of Five Pounds offered for the best set of Six original Double Acrostics in Verse has been awarded to Mr. WILLIAM MAURICE ADAMS, *33, Lupus Street, London, S.W. Special Commendation is accorded to* LINDA GARDINER, *Winchester, for the variety and excellence of her Acrostics. It also affords us great pleasure to be able to state that many out of the very large number of Acrostics submitted to us possessed more than average merit.*

SPECIAL NOTICE.

The Six Prize Acrostics will appear monthly in due course; and as soon as the sixth shall have appeared (and not till then) the Editor will be happy to receive sets of Answers to the whole six; and for the best set (i.e. *the most correct and ingenious*) *the Proprietors of this Magazine offer a Prize of Two Guineas. Mere "keys" to the Acrostics, however correct, cannot be received; the answers or "lights" should be embodied in verse.*



(*Drawn by* WILLIAM SMALL.)

"TURNS HIS DULL COLD EYES ON HER FOR ONE MINUTE 'HOW DO YOU DO?' HE SAYS."

("*THE PROBATION OF DOROTHY TRAVERS*," *page* 65.)

THE PROBATION OF DOROTHY TRAVERS.

A STORY OF WAITING. By the Author of "In a Minor Key."

CHAPTER THE FIFTH.

NEW RELATIONS.



"WHAT a buzz!" thinks poor shy little Dolly, as she nervously turns the handle of the library door, and walks, or rather steals in, hoping at last to see her father.

She has changed her travelling dress, and has also written a short but loving letter to Uncle Tom and Aunt Mary, so she is certainly late. The library seems to be full of people. The gentlemen are come in from shooting, and besides Lady Travers there are two pretty-looking girls sitting near the tea-table. Every one is laughing and talking. She hears German as well as English; her eye lights on Lady Travers' elaborate tea-gown, on the strange girls and men, and her shyness would quite overpower her but that she is thinking too much of her father to bestow great attention on any other object.

She looks round the room seeking to identify him, and supposing he will come forward to meet her. But every one is engaged in conversation; no one comes towards her, so with a becoming blush on her pretty face she advances to the tea-table. Mr. Ingram alone rises from the side of one of the young ladies and places her a chair, and then Lady Travers suddenly lifts her eyes from the tea-cups.

"Ah! here you are, my dear child. Gus"—and she looks behind her to a group of men all talking and gesticulating rather noisily except one—"come here and make acquaintance with your daughter."

A pale, solemn-faced, aristocratic-looking man detaches himself from the group, comes forward, and looks round vaguely.

Dolly rises and advances towards him with eagerly extended hand. Her father turns his dull cold eyes on her for one minute, and gives a little start of surprise.

"How do you do?" he says, "I hope you accomplished your journey comfortably."

"Oh, yes, quite easily," answers Dolly, her brown eyes lifted to his face with a look which would have made most fathers feel proud of such a daughter, but Sir Augustus does not notice it; his thoughts are with his German friends, and whilst she is answering him he has already turned his back on her, and is again in their midst.

"Here is your tea, Miss Travers," and Mr. Ingram, who has been watching the meeting and remembering Ferdie's words, gives her a cup of tea and hands her hot tea-cake, and Dolly sinks gratefully back into her chair, and wishes she were not so dreadfully silly, for she knows and feels that two great tears stand in her eyes, only fortunately Mr. Ingram never looks at her, being apparently occupied with handing as many cups of tea at a time as he can without danger to himself and the company.

"I suppose I must introduce myself," says a brusque but not unpleasant girl's voice at her side, and she looks up at a bright decided face, the owner of which, attired in an excellently well-fitting ulster, stands above her, looking down not unkindly on Dolly's small head. "I am your cousin, you know."

"I did not know it," answers Dolly, smiling, having firmly suppressed those troublesome tears, and extending her decidedly brown hand, "I do not know any of my relations."

"No, I suppose not, as this is your first appearance among them. They are not, however, very numerous, so you will soon take them all in, though at present you are rather vague about them."

"Very. Please do tell me how you are my cousin?"

"We used to live here"—rather defiantly—"now we live down at the Lodge;" and she points out of window as Mr. Ingram has done before.

"Oh! I see; I understand." Then turning to Mr. Ingram, "You thought I lived at the Lodge, did you not?"

"Yes, I took you for another sister of Miss Travers. You see, although I have known your father for the last ten years I have still to learn the family history."

After this Dolly begins to feel more at home. Miss Travers and Mr. Ingram are evidently very intimate, and as they talk she sits by and listens and laughs as they explain to her the rest of the party, not always, it is to be feared, in a perfectly charitable spirit.

"I cannot stand these foreigners that they have collected here," says Joan Travers. "To begin with, I cannot speak their language, and I do not care to listen to their broken English."

"They speak most excellent English, oh, most prejudiced of John Bulls!"

"Your ear has got corrupted through your long sojourn on the Continent," retorts Joan. "Anne, you see, does not mind broken English; she makes herself very happy with the little baron: look at her;" and Joan points to a sofa where sits her sister, fair, small, and *mignonne*, side by side with a dark

Italian-looking Austrian, apparently immersed in the most interesting conversation.

"How pretty she is!" says Dolly.

"Do you think so?" answers Joan. "It never struck me Anne was pretty, but I suppose she is though; at any rate, the baron seems to think so. I am sorry I must interrupt their interesting conversation, but it is time for us to think of going;" and Joan walks up to her sister and summons her somewhat imperiously to depart. A little altercation ensues, and meanwhile Dolly turns to Mr. Ingram as to an old friend.

"Are those two sisters?" she asks.

"Yes."

"And my first cousins?"

"Yes. Your father and their father were brothers. On Sir John's death, as he had no son, the title and property went to your father, and they and their mother retired to the dower house in the village, about half a mile from here."

"Oh! thank you. Now, when I have seen all my brothers and sisters, I shall know all about every one."

Mr. Ingram smiles. "I wonder what you will think of your brothers and sisters," he says. "Two of the boys, Jack and Bob, are just gone back to school."

"Are they? I am sorry for that. Are not my sisters named Rose and Louisa?"

"Yes, and Gus and Ferdie are your two other brothers. Ferdie is my especial *protégé*, and if I mistake not he will be yours too. Poor little fellow, he is never well for twelve hours consecutively, but he is the sharpest, queerest little mortal I ever met with, and undoubtedly the most impudent."

"So I found out."

"He is no respecter of persons. Unfortunately he is a great deal too sharp; nothing ever escapes him. Ah! I see the Miss Travers are going," and Mr. Ingram rises to accompany Joan and her sister to their carriage.

"Come, Lou," says Joan, in her deep voice, as she addresses Lady Travers, "come and see my new pair."

"We will all come," answers Lady Travers sweetly, "for my opinion is worth nothing; I am so deplorably ignorant about horses."

"*My* new pair," meanwhile murmurs Anne, *sotto voce*, and asks the baron if he likes horses.

"Extraordinarily," he answers, and Anne smiles bewitchingly, and invites him with some emphasis to judge of her mother's new purchase.

So the whole party, Dolly included, sallies out into the hall, where Joan puts on a masculine-looking hat, and prepares to take the box-seat of the waggonette that stands at the door, whilst the gentlemen survey the horses from all sides, and give their opinion on them. Mr. Ingram goes into the subject *con amore*, and he and Joan look very solemn over the matter, as the latter mounts to her eminence.

The baron gives little Anne, wrapped in velvets and fur, and presenting a great contrast to her sister, a helping hand, and they are off; Joan holding in the two fidgety horses with a firm hand, as they break into a canter down the drive.

"Who goes out cub-hunting to-morrow?" she shouts looking back.

Mr. Ingram responds, "I do."

A nod of her head, a bright smile, and in another minute the waggonette is out of sight.

"There go two admirable specimens of the English girl of the present day," says Mr. Ingram to Dolly, as they quit the hall door to return to the library.

"I like Joan the best," says Dolly decidedly.

Mr. Ingram laughs. "You have made up your mind with feminine rapidity," he says; "but you are right. Take away Miss Joan's ulster and man's hat, and she is the more womanly of the two."

"Dorothy dear," and Lady Travers lays the whitest of hands on Dolly's shoulder, "will you come upstairs with me, and see your sisters and the rest of the children?"

"Oh, please," says Dolly, delighted, "I want so much to see them."

Lady Travers leads the way again, very much in the same direction as where Dolly's bed-room lies, only not so high up. Afar off the sound of children's voices greet their ears, pitched rather unpleasantly high, and indicating that a skirmish is going on. Lady Travers sighs heavily, and comes to a standstill, drawing Dolly into her boudoir, which lies on the road to the schoolroom, and seating her, with an air of gentle resignation, on the sofa.

Dolly looks round the charmingly-furnished room, and her quick eye takes in its many luxuries and beauties. Lady Travers has not spent all these years abroad for nothing. The pale dingy green walls are literally covered with pictures. Copies in oils from the smaller masterpieces of the Dresden and Madrid galleries, enclosed in Florentine frames, smile down on Dolly's delighted eyes; rare bits of Buen Retiro china, of exquisite old Dresden and Meissen, stand on bracket and cabinet or mingle with the pictures on the wall, throwing out by their delicate colouring the deep red of the coarser but equally exquisitely-shaped Portuguese pottery, in which are grouped pale pink gladiolas, feathery asparagus, great golden sunflowers, and tall wavy pampas grass. A rich, subdued though many-coloured carpet, heavy portières and curtains, inviting low chairs, and lastly a bright fire complete the perfectly cosy, home-like look of the room.

"Oh! how pretty;" says Dolly involuntarily, as she seats herself on the sofa at Lady Travers' invitation, "what a lovely room!"

"This is my sanctum," answers her stepmother. "I think it is pretty, although it is difficult enough to make it so without money."

Dolly stares with surprise, and Lady Travers proceeds—

"That is exactly the subject on which I wanted to talk to you, my dear child;" and the resigned look gives way to one of extreme solemnity. "You are old enough and, if I am not mistaken, wise enough to be told something of the affairs of the family. Your

father, as you are aware, has lately come into this property and the title, but you must understand that the late Sir John left every penny he could away from him to his two daughters Joan and Anne, whom you saw to-day. The result is, your father is by no means, as so many people imagine, a rich man. I sometimes think we ought to have continued abroad and let the place, but he did so yearn for England and his own home that I had not the heart to urge it. Now we are here we must make the best of it, but it is the education which is the difficulty. Four boys to send to school is no light matter in these present expensive days, and so I am trying to find a moderate governess for the girls and Ferdie, but really the salaries asked are so exorbitant that we cannot afford them. I am in correspondence with two or three English ladies now; and that brings me to a little favour I am going to ask of you, dear;" and Lady Travers smiles at Dolly in a way which would have made her offer to do anything in the world for her. "Will you be so very kind as to look after the schoolroom a little until I find a governess—preside at the tea, take the girls' music, and so on? They are growing so wild that they want a soft restraining influence amongst them, and that I feel sure you will supply. I can judge from Mr. Bruce's letters how admirably you have been brought up."

"Indeed," answers Dolly, quite transported by this compliment to her dear Uncle Tom, "I will do anything I can, but I know very little, really I do."

"Tell me something of your life at Holme Regis, and what you did with those excellent people;" and Dolly, her heart full of Holme Regis and the Bruces, begins, shyly at first, but noting the sympathy of her listener, grows eloquent as she relates the history of the happy bygone days and all the learning she acquired there. Suddenly she stops at the remembrance of Harry—her own dear Harry—and her secret in connection with him grows too overpowering. What would she give to make it known to this beautiful, gentle stepmother, whom her wildest dreams have never depicted as one half so fair and fascinating as she is in reality! but Uncle Tom and Harry have both bade her wait until she hears from them, and there is nothing for her to do but to obey. But Lady Travers hardly heeds the interruption. A smile of satisfaction has spread itself over her countenance.

"Why, you are quite a little blue-stocking," she says playfully, her blue eyes gleaming brightly, "with your Latin and your Euclid. You will be good-natured, I know, and begin Ferdie with Latin, he is so very anxious to learn it; and now, dear, you shall come and make acquaintance at last with my olive-branches, of whom I am afraid I am much too proud."

"What a dear, beautiful, sweet woman," thinks Dolly, wondering how she can ever have dreaded such a stepmother, "how silly of me to feel afraid of her!"

"By the way," remarks Lady Travers, as they ascend to the schoolroom, "do not mention Holme Regis to Mr. Ingram. The Manor there used to belong to his father, but he sold it, and his son, although he was only ten or eleven years old at the time, cannot bear to speak of it or hear it spoken of even now."

So Mr. Ingram was a bit of home after all. Of course, she ought to have known it at once. Had not his face from the first moment seemed familiar to her? and, now she comes to think of it, is not he wonderfully like the portraits of so many of the old Ingrams who frown and smile in hall and dining-room and gallery at the Manor, and that she has known from her babyhood upwards until they are no longer dead portraits to her but living acting men and women?

She is about to express her satisfaction at Lady Travers' information when, with the opening of the schoolroom door, her thoughts are diverted into a fresh channel, and her interest in the Ingrams is swallowed up in the excitement of at last greeting her brothers and sisters.

CHAPTER THE SIXTH:

IN THE EVENING.

THERE is a hush in the hot, excited voices, as Lady Travers opens the door and introduces Dolly into the room. The combatants stand ranged on either side of a large table, the cloth of which is liberally besprinkled with ink-spots, and try and look as though they were peacefully employed, whilst in a corner Ferdie lies on his couch, grinning maliciously. The two girls hang their heads rather sheepishly, and a little boy of about nine years old looks ostentatiously out of window, and pretends not to see his mother.

"What was all that noise, children?" asks Lady Travers, in her dulcet voice.

The eldest girl, dark-haired and defiant, looks up.

"Ferdie, as usual, mother," she answers laconically.

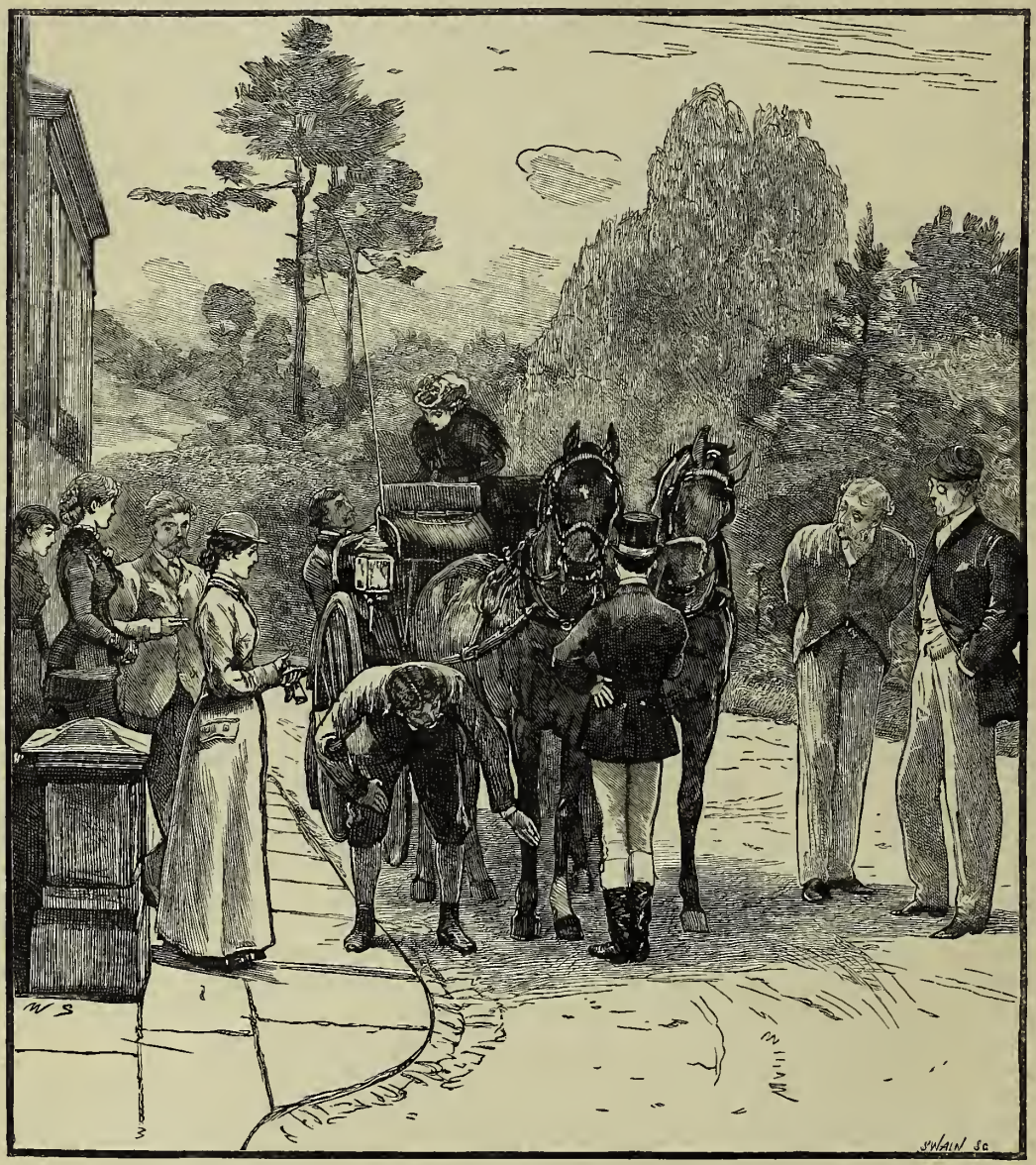
"Well, I will ask no further questions to-day, as I have brought your sister to introduce to you, only pray do not treat her to any of these pretty scenes, or she will be quite shocked. And now, dear Dorothy, as I have a letter to write before dinner, I must leave you here to make acquaintance with your brothers and sisters in your own fashion, and I have no doubt you will soon all be excellent friends. Dinner is at half-past seven."

Lady Travers leaves the room, and Dolly finds herself alone, with four pairs of eyes levelled on her at once, but as they belong to her brothers and sisters, she is not so much disconcerted by them as she might otherwise have been.

Ferdie takes upon himself the office of host of the schoolroom, introduces Dolly formally to her sisters, and her sisters to her, and gives each party a little sketch of the other. His perfect gravity and old-fashioned formality are so supremely absurd, that Dolly cannot restrain herself from laughing; and this burst of involuntary mirth does more towards making her friendly with the schoolroom party than all Ferdie's orations. The little boy is, however, intensely offended, and relapses into dignified sulkiness, till petted and coaxed back into good humour by the penitent Dolly.

The episode has the effect of breaking down the barriers of shyness, and of a certain suspicious defiance of manner on the part of the children, and in a short time Dolly has found out their names and ages, and being almost as much a child as one of themselves, is certainly happier with them than she was in the library. They are good-looking children altogether, especially Rose, the eldest girl, with her intensely black hair and vivid colouring, and Ferdie, fair and fragile as a rose-leaf, as they cluster round Dolly, and listen eagerly whilst she relates to them stories of her life at Holme Regis. Their conversation is curiously interlarded with German and Spanish, and their English betrays a slight foreign accent, which is very taking.

But Ferdie is Dolly's especial object of attention. To begin with, he is ill, and he is the youngest, and such a funny, bright, and yet malignant little being. Unnaturally quick and acute, he already comprehends that Dolly will easily be converted into his willing slave, and he puts forth all his charms, which are numerous, in order to throw his fetters around her. "And who is Harry?" he asks in his shrill little voice, as Dolly proceeds with her tales, in which the phrase "Harry and I" so often occurs; and at the same moment the door opens, and Mr. Ingram walks in.



"JOAN PREPARES TO TAKE THE BOX-SEAT OF THE WAGGONETTE?" (*p.* 66).

"What an unnatural calm!" he remarks, as he seats himself in rather an unsteady chair. "Miss Travers, you must be a witch."

"Don't bother," says Ferdie. "Go on, Dolly. Who is Harry?"

Dolly feels herself blushing a hot vivid crimson, as Mr. Ingram's eyes, fixed on her, await her answer. Does not Harry live at Holme Regis, and has she not been forbidden to mention that spot to Mr. Ingram?

"Harry? Oh! Harry is Harry——" she stammers.

"Well," pettishly from Ferdie, "I think we knew that already."

"He is Harry Leonard, and as the Leonards lived near us, I was always about with them."

"Leonard, did you say, was the name?" asks Mr. Ingram, leaning forward in his chair. "Might I ask, Miss Travers, where it is you have been staying?"

"At Holme Regis Vicarage," answers Dolly, blushing again as she mentions the forbidden word.

"And the Leonards live at the Manor, do they not?"

"Yes."

"Excuse my asking so many questions, but the fact is, I knew that part of the world formerly very well, and am interested in it. I used to live, when a child, at Holme Regis."

Dolly's face brightens. She is so pleased that he has mentioned the subject himself, for now she may talk about home with him.

"It is such a lovely place," she answers.

"So I always thought, but then I left it when a mere child. Tell me, have these people, these Leonards"—with an involuntary accent of contempt on the "these"—"quite spoilt it?"

"Oh, no; not in the least. They have not touched the house, except to repair it, and build a conservatory. That and the stables alone are new. Mr. Leonard is quite a gentleman, and has very refined tastes," she adds, standing up for her absent friends.

"Yes, the stables were very bad," he answers musingly. "I suppose there was nothing to do but to pull them down. Where have they built the new ones?"

"On the site of the old ones."

"And they are very magnificent, I suppose?" with a slight sigh, as he pictures to himself a huge pile of buildings, with here a tower, and there a turret, and all the accompaniments of luxury without taste, and money without discernment.

"They are built as nearly as possible like the old ones, only they are larger, and better ventilated, and," with a smile, "with all the modern improvements. Oh, they are such beautiful stables!" and Dolly thinks of the many visits she and Harry have paid there to the pony, and the sleek lazy carriage-horses.

"I am sure they must be. And where have they put the conservatory?"

"Do you remember the niche formed by the drawing-room window that looks out on the Dutch garden and the yew avenue?"

"Perfectly."

"The conservatory is built in that niche, and opens into the drawing-room. But I have two photographs of the house, taking in the stables and the conservatory. Would—would you like to see them?"—very shyly.

"I should indeed," he answers earnestly, and, only too pleased to descant for ever on Holme Regis, she rises to fetch them.

"Is not she pretty?" asks Ferdie the irrepressible, as soon as her back is turned, for he has grown very tired of all this conversation about a place of which he knows nothing. "Mother did not expect her to be so pretty, I know. I heard her tell father that he must be sure and be kind to her, for she was afraid the poor girl was very plain;" and Ferdie mimics his mother's voice and manner painfully exactly.

"I hope she will do something with you," answers Mr. Ingram, "for at present you are the most impudent child it has ever been my ill luck to meet."

"Thank you," says Ferdie, grinning from ear to ear. "I know what has upset you: Dolly defending the Leonards. Do you know, Geoffrey," and he suddenly looks quite grave, "I have never heard you speak of Holme Regis before."

"I dare say not, Ferdie. I left it twenty years ago, long and long before you were born;" and there is a look in Geoffrey's face which is new to Ferdie, and which causes him to steal his little hand sympathetically into Mr. Ingram's. At the same moment the door opens and Dolly enters bearing two large photographs, which she places in front of Geoffrey.

"There it is."

It is difficult to say who looks at the pictures the most lovingly, Dolly or Mr. Ingram, but they are not left in much peace to do so.

"Do you hear me?" squeaks Ferdie; "do you hear me, Dolly? show me the photographs at once." But Dolly, who has for many years reigned queen supreme over Harry and Uncle Tom, has no intention of surrendering herself to this small tyrant.

"When Mr. Ingram has done with them," she answers coolly.

"And," adds that gentleman, "when you have learnt to speak properly."

Ferdie turns red, and then white; he is on the verge of an awful fit of passion. His sister knows the symptoms, and so does Mr. Ingram.

"No nonsense, Ferdie," he says sternly, "you know I will not allow it."

"I hate you, I hate you," splutters Ferdie, but he does not get beyond that, and finishes by patiently awaiting the photographs, whilst Dolly stoops over him caressingly, and kisses him.

They are all very happy together after this little interruption. There is a delightful absence of restraint in that shabby, untidy, ink-spotted schoolroom. Mr. Ingram is apparently a very old friend. He turns out to be Ferdie's godfather, and has known most of the children since they were babies. He remarks casually on Rose's rough hair, on Louisa's round shoulders, and seems to be immensely beloved and slightly feared by them all. Dolly, to her own surprise, is quite cheerful, and the mirth has risen to the noisy pitch, when the door suddenly opens, and Lady Travers looks in.

"How happy you all seem!" she says sweetly, but

Ferdie, who alone can see her face, discovers that she does not look over well pleased. "I am so sorry to disturb you, but, Geoffrey, can I have one little word with you? Dorothy, dear, dinner will be ready soon, and we are expecting a few friends."

On this hint Dolly retires to inspect her dress, and see whether it is suitable for the "few friends," whilst Geoffrey Ingram, a trifle unwillingly, rises to obey her ladyship's behests.

"Come back, and carry me up-stairs," says little Ferdie, putting on a beseeching look, which is wonderfully winning.

"And, Dolly," he adds patronisingly, "you may come and see me in bed."

Dolly feels anxious about her dress, as she looks over her slender stock of evening toilettes, very suitable for the Vicarage but hardly so for the new atmosphere into which she has been transplanted. She feels rather rueful as she descends to dinner in a simple black dress, considered by Aunt Mary as quite the last thing in fashion. But Mrs. Bruce, who was so anxious to send her darling home clad as became a daughter of Sir Augustus Travers, after living for thirteen years in a secluded country vicarage, has very limited ideas of the modern meaning of the word "fashion," and has had still more limited means for carrying them out.

The black dress, the result of deep thought on her part and on Dolly's, assisted by fashion-books, and manufactured for the most part by the wearer herself, is undoubtedly rather old-fashioned, and simple to absolute plainness, but it fits well and sets off Dolly's creamy white throat and rounded arm and wrist to advantage. A glorious Gloire de Dijon rose looks temptingly in at her window, and she gathers it to place coquettishly on one side of her dress. She is not in the least aware that, with her youth, her beauty, her lithe upright figure, and sweet girlish face, she needs but little adornment. She knows she is pretty, but imagines that in the great, hitherto unknown world, there are hundreds better-looking. So, in fear and trepidation, she trips down-stairs, and encounters her father in the hall. They are alone. Perhaps he will kiss her, thinks poor foolish little Dolly, but he only says—

"You are just in time, the gong will sound immediately. I am very particular about punctuality," and with that he ceremoniously opens the door for her, and she enters the library. She and her father are late; every one is assembled, and as they enter the gong sounds, and dinner is announced. Dolly finds herself walking in last without a gentleman, and eventually settles down between Anne Travers and the count, who is next to her stepmother. Opposite to her are seated Joan and Mr. Ingram, and the rest of the few friends resolve themselves into two pale girls, with light brown hair and washy blue eyes, attired in pale pink muslin, and the rector of a neighbouring parish.

Anne is making dashes at German, and begging prettily to be corrected, with little Baron Stieglitz. Lady Travers is pensively conversational with the count, so Dolly is at leisure to survey the company, and also the portraits of her ancestors, which adorn the dining-room walls. There is one picture that particularly takes her fancy. It is that of a lady, represented in a large coal-scuttle bonnet, and holding one child on her lap, whilst she puts her sweet bright face down to kiss another—a fat sturdy little boy, of about three years old.

Joan, from the other side of the table, sees her looking at the picture, and leaning across, remarks—

"You are just like her," and then she and Mr. Ingram laugh.

"How intimate they seem!" thinks Dolly; "perhaps they are engaged to be married," and her thoughts revert to Harry. Joan is not so nice-looking of an evening as of a morning. Her ulster is more becoming to her than evening dress, and she eats her dinner rather as though she were driving.

"I must take that little girl in hand," she is saying to Mr. Ingram, "or my lady will be too much for her."

"Do not destroy her belief in my lady," he answers; "she is so young and ignorant that the glamour may last as long as a whole year."

Joan laughs, and asks how long it lasted with him.

"For more than a year, certainly," he answers; "but then I was an infatuated boy, and not her stepdaughter. We are excellent friends now, but we know each other better than we did in those early days. I recognise her many good qualities, and she knows me to be her very good friend. Do you know, Miss Travers"—quite abruptly—"that your cousin has just come from my old home, Holme Regis?"

Joan is fairly intimate with Geoffrey Ingram, but has never yet heard him mention that he has ever had a home beyond the different courts to which he has wandered in the course of his profession, but she knows his history, and looks sympathetic.

"No, indeed," she answers. "What a bond of union! Who lives there now?"

"Some people of the name of Leonard, with whom Miss Travers seems to have been very intimate."

"I expect she was very happy at her Vicarage," and as she says it, Joan glances at Dolly, who sits mute between Anne and the count. Just then Lady Travers gives the signal, and the ladies rise and retire into the drawing-room, Joan with a happy lingering smile on her lips, as she and Mr. Ingram exchange some laughing remark, whilst he holds open the door for her to pass out.

"Are you coming out to-morrow?" she asks Dolly, as they cross the hall to the drawing-room.

"Out where?"

"Hunting. You know, I suppose, that hunting is the order of the day in these parts?"

"Oh! how I wish I were. I am so fond of riding. But you see I have no horse."

"I will manage that," and Joan looks as though she meant it, for her attitude, as well as her face, is resolute.

"Certainly her sister has a very ugly figure," thinks Anne complacently, as she places her own *mignonne*

little person almost inside the fender, and shivers as though it were January.

"Lou," cries Joan, addressing Lady Travers, "cannot this child go out to-morrow?"

"Where to, dear Joan?"

"Hunting."

"I should be charmed that she should do so, if she wishes it, but unfortunately there are several reasons to prevent it. Firstly, I hardly thinks she knows how to ride; secondly, there is no horse for her; and thirdly, Sir Augustus would not approve of it. Have you asked your father, Dorothy, for his permission?"

"Oh! no," she murmurs, "I never thought about it."

"I am the culprit, Lisa. Dolly looks somehow as though she would ride well, and I thought she would enjoy it. Surely she might have old Soldier?"

"I am so sorry, dear Joan, but Sir Augustus will want Soldier to-morrow."

Joan pulls a comical face, as, taking Dolly by the arm, she draws her to a sofa at the other end of the room.

"I have incurred her ladyship's wrath," she says; "when she calls Uncle Gus, Sir Augustus, I know I am in disgrace. I am always interfering with some one, so it serves me right; but I am so accustomed to manage at home, that I get into the way of it."

"It was very kind of you to try and manage for me. May I come and see you to-morrow?"

"Of course you may; do you know I must mount you somehow to-morrow. I know!" clapping her hands, "Geoffrey Ingram has two horses here, he shall lend you one."

"No, no, indeed, Joan. I would rather he did not. I have ridden so little, that I would not for the world ride a stranger's horse; and besides, papa would not approve of it."

A shrug of the shoulders from Joan. "I am not so sure of that."

"Anyhow," answers Dolly resolutely, "I would so much rather you said nothing more about it. I should be sure to have an accident—fall off, or break the horse's knees, or do something dreadful. Why, I know so little about riding. I have only ridden Harry's horses; and my habit is shabby and badly made. Is not that conclusive?"

"Yes, perhaps it is."

"Then promise me you will say nothing more about it."

"Well, I suppose I must, but when you know me better, you will learn that I never like to give up anything that I have set my heart on, and I had rather set my heart on seeing you out to-morrow."

A few minutes afterwards the gentlemen come in, and Joan beams a smile of welcome as she sees Mr. Ingram advance towards them, and taking a chair, seat himself near them.

"Did you hear us in the dining-room?" he asks. "We have all been arguing at the tops of our voices."

"What about?"

"Oh, the old story, German politics. Where are the children?"

"I think they are cooking in the schoolroom," answers Dolly. "They said they did not care about coming down-stairs."

"When are those children going to have a governess?" asks Joan.

"Lady Travers is looking out for one now," responds Dolly, and turns her eyes to the piano, for the count has seated himself there, and Anne and the baron stand behind him and pour forth, "I would that my love," in a clear weak soprano and a strong powerful baritone. The accompaniment is decidedly the best part of the performance, for the baron sings as though he were longing to break into his native tongue, and in stentorian tones that quite drown poor little Anne's feeble treble.

"How can Anne make a display of herself," mutters Joan, "with that ridiculous little pipe of hers?"

"No one could hold their own against such a roar," remarks Mr. Ingram. "Why is it that small men so often have big voices? Now, if the count were to play, that would be a very different thing. You would be delighted, for his playing is simply divine."

So thinks Lady Travers, for at the conclusion of the duet, whilst Anne modestly droops her head awaiting compliments which do not come, she advances to the count and asks him to play.

It is, as Mr. Ingram said, quite another thing. The whole man seems transformed as he complies with the request, and commences with a few minor chords, which melt into a sweet dreamy nocturne of Chopin's, wild and sad as the moanings of the wind, weird and fantastic as an elfin song.

The talk is all hushed, not a word is uttered as he plays on and on, passing from Chopin to soft melting adagios, light rippling minuets and trios, breathless prestos, glorious majestic chords; and with every inflection his countenance changes too, as he tosses back his long hair, and gazes as though inspired at the ceiling.

Dolly listens with her whole being. She has never heard anything so beautiful since she went over to the Hereford Festival, two years ago. She could listen all night, as she sits there, with her two sweet eyes fixed on the player, her red lips just parted, showing her china-white teeth. Perhaps she and Geoffrey Ingram are the only two who are really wrapt in it. Joan does not care for music, and the rest have many things to reflect on to this magnificent accompaniment. Still the count plays on, selections from the works of his great countrymen, whilst Anne and the little baron sit and look at each other, and the latter gives nods and murmurs of approval.

At last the count, tossing back his hair, ceases, and suddenly looks round. He meets Dolly's rapturous gaze, and jumping up, nearly upsetting the music-stool, goes straight up to her.

"You play?" he says abruptly.

"No—oh, no!"

"You love music?"

"Yes."

"I knew it, I could read it in your face; but these,"

and he waves his hand around and shrugs his shoulders, "they do not really care for it."

"You must except me, count," says Geoffrey Ingram, much amused at this sweeping denunciation.

"It is of the ladies I speak. You ought to play," turning again to Dolly, and looking at the long fingers of her little hand.

"Of course Miss Travers plays," puts in Geoffrey, "but who would care to say so, after what we have just heard?"

"Just so," answers the count, with perfect imperturbability, whilst Dolly rises in obedience to a summons from Lady Travers.

"Your father wishes you to sing, dear," she says.

Dolly begs to be let off. She "really cannot sing," she answers, but Lady Travers is firm. Mr. Bruce, the contents of whose letters she has never forgotten, has said that she sings, and every one wishes it. The count comes up and insists, Mr. Ingram seconds him, and Lady Travers, sweetly but firmly, again quotes Sir Augustus, whilst she makes room for the count by her side. Sir Augustus himself is reading the newspaper, whilst he awaits his daughter's obedience to his wishes. Joan, too, comes up.

"Come, Dolly, sing at once. Don't be nervous."

Dolly looks round hopelessly. Every one is against her, and she, who has never had a lesson of a master in her life, must sing before all these people and that wonderful count, who can make the piano do anything he wishes. So in fear and trembling she walks to the piano and sits down, whilst the count rises from Lady Travers' side, and plants himself behind her. Joan looks up at Geoffrey Ingram, but he is obtuse, and does not understand her. Lady Travers is pensive. The count murmurs, "Courage," and there is a dead silence.

How feebly, how tremblingly, come out the first notes! Lady Travers leans back on the cushions of the ottoman and a gentle, pitying smile flickers round her lips. The count waves his hands, the notes swell out louder, and at the end of the first verse of "Auld Robin Gray" the little baron startles Anne by a loud "Bravo!" It gives Dolly courage, and the second and third verses wax firmer as she forgets her audience, and only thinks of the music and the words. The little tremble in her voice suits well with the theme; her notes are so clear and fresh, her pathos so natural and true, that the company is charmed. Even Joan has listened, side by side with Mr. Ingram, and claps heartily at the end, whilst the count and the baron applaud noisily.

"Very nice, Dorothy," says Lady Travers.

But Dolly looks at her father, at whose special request she has been singing, and behold, he is asleep; so she slips away to the back of the room, leaving the piano disengaged.

Some one—the baron—suggests four-part songs. The well-known Mendelssohns are produced. The count takes the accompaniment, Anne and Dolly the treble and alto, the baron the bass, and Geoffrey Ingram the tenor.

Dolly thinks it quite delightful. The count conducts them ably, scolds them all round in his native tongue, tells Anne she does not sing in tune, which fortunately she does not understand, and plays the accompaniment divinely.

Lady Travers listens with a set smile on her lips, and talks to the pale girls, who decline to take any part in the concert; and Joan picks up the paper, and reads it attentively. By dint of the count's exertions the performance is really creditable. Anne is the principal defaulter, and her organ is so small that it is little missed; the baron is steady and stentorian, and goes on in perfect time and tune to the end.

Sir Augustus wakes up to whisper to his wife that the noise is deafening, and the pale girls' carriage is announced.

There is a general break up. Sir Augustus pretends he has never been to sleep; the count compliments Dolly, and seeing the mild reproach in Lady Travers' eyes, returns to her side. There are wrappings up and good-byes, for Joan and Anne are going too. The former kisses Dolly warmly, and turns to Mr. Ingram.

"We shall meet to-morrow morning," she says brightly and happily as he puts her into the carriage, and fancies that his shake of the hand is somewhat warmer than it is usually. Then the candles are lighted, and the ladies retire up-stairs.

"Good night, dear child," says Lady Travers, as she stops on the landing where she and Dolly part. "And whilst I think of it, I know you will not mind my giving you one or two little hints. You are so young" —with such a sweet smile—"that you cannot, of course, know the world like such an old woman as myself."

"I know nothing," answers Dolly. "Please help me and tell me everything."

"Well then, dear, I must suggest that if ever you wish anything done you come straight to me. There is nothing like straightforwardness, and although dear Joan means well, she is rather too impetuous."

"Indeed, I did not think of going out to-morrow, only Joan very kindly thought I should like it, and mentioned it to you."

"And again, next time you sing choose an English song; those Scotch words are difficult to pronounce. And if I were you I would not be quite so pathetic. I began to think you must have a Jamie of your own. That is all, my dear little girl. You are quite sure you do not mind? You see, I treat you as I would Rose or Louie. Good night again;" and Lady Travers kisses her fervently on both cheeks.

So ends Dolly's first evening at home, and no doubt she has enjoyed it very much. It seems the wildest dissipation after Holme Regis, yet she cries herself to sleep thinking of dear Uncle Tom and Aunt Mary and Harry, and her cheeks burn as she remembers Lady Travers' kind hints, and her words about a Jamie of her own.

Yes, she has a Jamie; and oh! that she might welcome him to Wrangham. To-morrow or the following day she will hear from him, and then—why, then all will be well.

CHAPTER THE SEVENTH.

AT THE LODGE.

"No, no, you must not say good-bye, Mr. Ingram. I have a thousand things to consult you about relative to the stables, so you had better make up your mind to stay and breakfast." It is Joan Travers who is speaking, as she and Mr. Ingram turn in at the Lodge-gate and walk their horses slowly up the drive, the morning after Dolly's arrival home.

suited to her taste: home-like and old-fashioned, with its close-shaven lawn, formerly a bowling-green, its straight variegated flower borders, and its weather-stained sun-dial.

She looks very handsome this morning on horseback, in her short dark blue habit, neat collar, and high hat. Her rather square massive figure suits well with the large powerful horse she is riding, her pretty brown hair is blowing about in the west wind, her eyes are bright with health and the exercise she loves,



"MR. INGRAM SEIZES THE BRANCH AND BENDS IT WITHIN HER REACH" (*p.* 77).

They stop in front of a pretty, old-fashioned, red brick house, square and substantial, with a roomy projecting stone porch, from which pale yellow magnolias throw out their perfume on the fresh October air. The rest of the house is smothered in ivy and Virginia creeper, and is the very embodiment of what it originally was: a thoroughly comfortable, prosperous farm-house.

A hundred years ago it was, in all probability, a gentleman's abode, as it is now, for it is five years since the late Sir John Travers arranged it with every comfort and luxury to act as a dower house for his wife when his brother Augustus should succeed to the property and title.

Joan has already grown fond of it. It is exactly

and Geoffrey Ingram, as he looks at her, accepts the invitation to breakfast without hesitation.

It is just ten o'clock as they walk into the dining-room, where sits Anne in solitude, reading a novel as she eats her breakfast. She looks washed out and faded by the side of Joan, who enters with her quick decided step, and immediately throws the window wide open.

"How hot the room is! Come, Anne, put away that nonsense, and make us our breakfast; we are famishing!" And she goes to the sideboard, and commences without delay vigorously carving a ham.

Anne turns with a smile to Mr. Ingram.

"Good morning," she says, with a little shiver. "I

really feel grateful to you for not speaking. Joan always comes into the room the first thing in the morning like Boreas, morally knocking one down."

Joan, to Anne's surprise, turns red, but tries to carry it off.

"The first thing in the morning!" she says with contempt, "and it is past ten o'clock. How is mother? Have you seen her?"

"Oh, pretty well. She is coming down about twelve. I hope, Mr. Ingram, you may at last be introduced to her to-day."

"I hope so too," responds Geoffrey heartily, as he seats himself at the table. "It really seemed as though I were destined never to make her acquaintance."

After this the conversation turns on the day's sport, on horses and hounds; but Joan is singularly silent, and allows Anne to make all manner of mistakes on these subjects without once pulling her up. On the contrary, she bustles over her breakfast, and declares she must go and look after household matters, if Mr. Ingram will be so good as to repair to the stables, where he will find the youthful groom rather glad of his advice and experience on the subject of one of the new carriage-horses, that is ailing.

Joan has her hands very full. She has all the household affairs to manage. She looks after the garden, the stables, the small farm, the village, the school, the clergyman's wife and his family, in short there is no one and nothing that she does not grasp, or try to grasp, within her strong, imperious will, her overwhelming energy and activity.

Mr. Ingram, smoking his cigar in the stables and the garden, hears her clear, metallic voice issuing her orders to the men and women servants, catches glimpses of her flitting here and there, and thinks perhaps Anne's simile for her was not so far wrong. He gets into a long conversation with the groom, and the man speaks of Miss Travers with a respect and warmth that says much for the love she somehow manages to inspire.

It is the same with the gardener, whom he finds gathering great golden sunflowers for "Miss Joan." He has heard the like opinion in the village; every one speaks of Joan's practical kindness and energy, and he thinks of what Ferdie told, him not so long ago.

"I like Joan," he said, "very much, if she would leave me alone, but she will always shake up my pillows and make me comfortable in her way, and not in mine."

He sits down on a garden seat to finish his cigar, and await his introduction to Lady Travers. He has heard many a story of this poor, paralysed woman, whose long illness has embittered her mind, and whose blunt words make her a terror and scare to the young and timid, and who is so liberal and kind to those she likes, so scathing in her remarks on those she dislikes.

"Mr. Ingram," calls out Joan's penetrating voice, and Geoffrey starts out of a doze, engendered by early rising, and hastens to obey the summons. Joan meets him.

"You must not be shocked," she says, and laughs nervously, "if mother is rather blunt in her remarks, and please do not mention Uncle Gus; he is her *bête noire*."

"I understand," says Mr. Ingram, with that frank, comprehensive glance of his, that Joan thinks so winning, as he crosses the square oak-floored hall with her, and enters the morning-room.

On a long, low couch at the end of the room by the window Lady Travers lies, as she has been lying now for some years. As a young woman she must have been very handsome; as an older one she bears the traces of it still, but sickness and sorrow, and a constant struggle against the inevitable, have left their impress on the proud, resolute face, from whence the piercing eyes look at Geoffrey as though she would read him through and through.

"How do you do, Mr. Ingram?" she says, with her eyes still fixed on his face. "I am very glad to make your acquaintance, as you are a friend of my daughter's. Sit down."

Geoffrey obeys, and seats himself on a low chair by the side of the couch, and remarks on the beauty of the morning.

Lady Travers dismisses that subject very curtly.

"I understand you are an old friend of Sir Augustus Travers," she commences, and something very like a sneer disfigures her face.

"You are quite right. I have known Sir Augustus for the last twelve years, ever since I was under him in South America."

"And you like him?" It is an abrupt question, abruptly put.

"He and his wife are both friends of mine, or I should hardly have dared to abuse their hospitality, as I have done for the last month," he answers.

"Of course you cannot like him—who could? But his wife is well enough; egregiously insincere, and in reality as selfish as Augustus, but she is pleasant to look at and to talk to. And what about this newly-arrived daughter?"

"Miss Travers can tell you more about her than I can. My opinion is that she is a very pretty, charming little girl, very young and fresh."

"She is not like her father, then?"

"Not in the least, as far as I have seen her."

"You must bring her here to visit me. Joan, do you hear, I want to see this child who has been so grossly neglected by her father. I saw her mother once, and liked her. A good woman, a world too good for her husband."

"Dear mother," says Joan, and all the Boreas has melted away from voice and manner, "do leave Uncle Gus alone. You do not happen to like him, but he is a friend of Mr. Ingram's."

"I am very sorry for Mr. Ingram, but he has probably no cause to dislike Augustus Travers, whilst I——" and look and gesture complete the sentence.

Mr. Ingram feels uncomfortable. He has a truly masculine dislike to the type of woman before him, and although he feels a profound pity for her, he has no wish to be put in possession of the details of a quarrel, such as must, he thinks, inevitably arise when two an-

tagonistic branches of one family live within a mile of each other. He is almost tempted to make some excuse for going away, but catching sight of Joan's distressed face, he refrains from so doing, and continues to sit a little longer.

Fortunately Lady Travers herself changes the subject, and commences talking of other things, of foreign lands, of some of Mr. Ingram's relations, whom she has met formerly, always in the same blunt, downright manner, which is sometimes amusing, and sometimes jarring, until it is time for him to depart.

"Mind that child comes to see me," she says, as he bids her good-bye; "I have a fancy that she is worth all the rest of the family put together. Bring her this evening to five o'clock tea. I suppose, though, that would not be correct, would it?"

"Mother, I will fetch Dolly," puts in Joan, "Mr. Ingram has other things to do."

"Than to bring a little bread-and-butter miss to see an old woman like me."

"Not at all," hastily interposes Geoffrey. "I shall be delighted to escort Miss Travers here, and as for the proprieties," with a laugh, "Rose and Lou shall do duty for them."

"Don't, for goodness' sake, bring one of those ill-mannered girls here."

Geoffrey slightly lifts his eyebrows. "They are not at all disagreeable girls, Lady Travers," he says, "but as you do not wish it, they shall not come. You will see Miss Dorothy, however, somehow, and I am sure you will be pleased with her."

"Did not I tell you, mother, I would bring Dolly myself? Please, Mr. Ingram, do not trouble yourself on the subject." But Geoffrey only smiles, and departs to walk back to Wrangham, reflecting *en route* on the eccentricities of the family he has just left.

"Yet," he murmurs aloud, "Joan is delightful. She is like a fresh morning breeze on the top of a mountain. It makes you shiver, but it braces you up."

Meanwhile Joan kneels by her mother's sofa.

"Dear mother," she says, "why will you be so bitter about Uncle Gus to strangers? You know it distresses me."

"Does it, Joan? I wanted to see what your friend was made of. I like him, my child. He is a gentleman;" and Lady Travers looks into Joan's brown eyes, until they fall lower and lower, and the sunburnt cheeks are dyed a deep, glowing red.

"Of course he is a gentleman," she murmurs, "small praise to him for that, seeing that he is, or rather was, Mr. Ingram of Holme Regis."

"You know I think nothing whatever of those distinctions. Augustus Travers is one of the Travers of Wrangham yet——" But Joan puts her large brown hand over her mother's mouth.

"I am a Travers, mother, I will not hear them abused;" and just then Anne comes in, a fresh pink colour in her cheeks, her blue eyes bright and dancing, and the conversation abruptly ceases.

Meanwhile Dolly has spent the morning in "settling herself," as she calls it. She has unpacked her few worldly possessions, somewhat swelled indeed by the farewell presents from the loving inhabitants of Holme Regis, her books, her pictures and ornaments, and has converted the dreary desolation of her "charming little room" into something like comfort. Her easel, her music, and her dear school-books have found a home in the schoolroom, where Ferdie gives them a patronising welcome, and Rose and Lou a grudging one. She has found time too for a hearty cry over Uncle Tom's photograph, and for a prolonged walk "over the estate," as Ferdie, who loves long words and grandeur, calls the tour they make of the gardens, the farm and the kitchen garden, round which he is drawn in his invalid chair. A restless activity has taken possession of her—the result, for the first time in her young life, of worry.

She dreads yet longs for to-morrow's post, which shall tell her how her fate and Harry's is decided; and how she is ever to communicate it to the cold, formal being who, she cannot but feel, has anything but a father's feeling for her, she does not know. His greeting to her this morning was nothing but a murmur, yet he had kissed Rose and Lou, previously to reading prayers, which he did in his usual monotonous, lifeless manner. Lady Travers alone has power over her husband. At her voice, her look, he lights up; a glimmer of sunshine comes into his face, and it is evident that, hidden somewhere, deep in the recesses of his inner being, he has a little store of that commodity called Love, not to be given away in generous handfuls to all around him—such a proceeding Augustus Travers could not understand, much less countenance—but to be centred and accumulated on one person, his wife. He has an interest in her children, because they are her children, but Dolly is no more to him than any other girl. She only serves to remind him of that one year in his life which he does not care to look back upon, which he was condemned to spend with a woman he neither loved nor understood, and whom, his conscience whispers unpleasantly, he might have made happier during her brief life with him.

Both he and Lady Travers are surprised at Dolly's fresh young beauty, for her mother was decidedly plain. But Dolly has struck out a path for herself, and leaving father and mother alone, has inherited the features of her great-grandmother—portrayed in the coal-scuttle bonnet—allied to a pair of soft, lustrous, almond-shaped brown eyes, and an exquisitely fine creamy skin, which are said to be the dower to her posterity of a Spanish grandmother on her mother's side.

It is luncheon-time now, she surmises, as, with Ferdie's permission, she gathers a deep red rose, wherewith to adorn her little person for that meal, and walks down the broad gravel drive by the side of the invalid chair. Ferdie is already dear to her. He is such a curious mixture, so quaint and pert, and even malignant one minute, so loving and pathetic the next, with his fair golden curls, and his deadly white face, which would be so pretty were it less sickly and more childlike.

He never ceases chattering, and is really of use to his sister, in putting her *au fait* of the minutiæ of the house, which Lady Travers has totally omitted to do. It is Ferdie who informs her of the number of domestics, horses, carriages, and so on that are kept, and tells her plainly he thinks her chances of a maid or a riding-horse are small, advising her to take care of herself. Dolly feels quite sure her step-mother will do her best for her, so she does not make herself unhappy over his hints, which she fancies are all directed at his father. At the same time she is painfully shocked at the child's tone when speaking of his parents. Never having known father or mother hitherto, she has formed an ideal of the relations between parent and child which is being rudely disturbed with every hour she passes in her new home. Ferdie's flippant speeches are a real grief to her, and she is not slow to express her disapprobation of them; but the child only laughs at her, and tells her she must not meddle with him, and she says nothing more on the subject.

They are still talking, however, as they approach the house, and Dolly has just put together what she considers a most bewitching combination of flowers for her bed-room—great scarlet poppies, graceful lacy hemlock, pale yellow bedstraw, and light wavy grasses—when they hear a step behind them, and Mr. Ingram catches them up.

"Good morning, Miss Travers."

"Good morning," she answers, "have you had good sport?"

"Pretty fair. And what have you all been doing?"

"Where have you been to since you came back from hunting?" interrupts Ferdie.

"To the Lodge, from whence I am charged with a commission. I am to take Miss Travers to partake of five o'clock tea with her aunt, Lady Travers."

"Are you in earnest?"

"Perfectly."

"Is not she dreadfully formidable?"

"Her bark, I should say, is worse than her bite—is it not, Ferdie?"

"She is a thoroughly vulgar woman," responds Ferdie, so exactly like his father in voice and manner that, try as they will to look grave, both Dolly and Mr. Ingram burst out laughing.

"Papa hates her," explains the child, "but I went to see her once, and she gave me lots of chocolate."

"Ah!" says Dolly, "I am afraid she will not give me chocolate. I think, Ferdie, you had better go with me to protect me."

"I will take care of you, Miss Travers."

"Thank you," says Dolly, reassured; and just then they reach the front door, and enter the house together.

The whole party is assembled at luncheon, where Lady Travers presides, gracious and beautiful as ever, her fair face flushed from the exertion of playing duets for the last two hours with the count, who has urged her on at the prestos in a manner calculated to give her brain-fever. Luncheon, however, interposed to save her, and much as she enjoyed the morning's entertainment, she was thankful when the deep notes of the gong drowned her feeble efforts, and compelled them both to rise from the piano.

She is busy now settling the afternoon's programme, which has been clearly drawn out in her diplomatic head since the morning. Dolly hears it arranged that Mr. Ingram, the baron, and her father should have a little quiet shooting in the nearest coverts; that the count and Lady Travers should drive over and see Rushbury, the show-place of the neighbourhood; and that she herself should be thoroughly lionised all over the grounds by her brothers and sisters, and finally preside at schoolroom tea. She wonders if Mr. Ingram has forgotten that she is to go and see her aunt. A sudden fit of shyness makes her unwilling to mention it herself, and she looks at him to see if he remembers.

"I think, Lady Travers," he says, and gives Dolly a little reassuring smile, "that your programme is admirable. I have a slight amendment to offer, the result of a promise made this morning. I have been to the Lodge——"

"So we supposed."

"And I was there introduced at last to the Dowager Lady Travers."

"A thoroughly vulgar woman," interrupts Sir Augustus, in exactly the voice and manner Ferdie so aptly imitated, and, heedless of his wife's "Gus, Gus!" "a thoroughly vulgar woman," he repeats.

Lady Travers looks annoyed and glances at her husband, who resumes his normal frigidity of demeanour whilst she turns to Mr. Ingram.

"Well, Geoffrey, you saw Lady Travers?"

"Yes, and she made me solemnly promise that Miss Travers should pay her a visit at five o'clock this afternoon."

"Indeed, poor thing! I have no objection whatever to the execution of your promise. I always make it a point if I can, in ever so small a way, to give pleasure to my poor sister-in-law, and if she wishes to see Dorothy she shall certainly go to the Lodge at five o'clock. Any one will show you the way there, my dear;" and with a sweet smile at her step-daughter, Lady Travers rises from the luncheon-table.

As they all file out of the room, Mr. Ingram opens the door for them, saying to Dolly, "I will show you the way to the Lodge."

She smiles her thanks, and nodding her pretty little head in acquiescence, passes out into the hall. Here the garden door stands open, framing in its archway as charming a little picture as she ever remembers to have seen, even at Holme Regis. She feels transported back there as she steps out into this little nook, set round with its thick black yew-hedge, quiet and private as a convent garden, formal and old-fashioned as were it trodden yesterday by Clarissa Harlowe. In one corner of it stands a wide-spreading yew-tree, rugged and knotted with age, and under it a long moss-eaten stone bench, flanked by two mythological stone figures. At the extreme end the yew floriates into quaint, closely-clipped shapes of birds, whilst in the centre the hedge opens, forming an arch-

way over a flight of turf steps, which leads to a brick-walled terrace which runs below. The turf in the centre is as smooth and shaven as an old bowling-green ; the flower border blooms doubly gay against the dense black hedge : great golden sunflowers and marigolds, red, lilac, and white asters, scarlet and pink gladiolas, phlox and sweet peas, stocks and mignonette : it is like the border in the kitchen garden at home, and Dolly drinks in the sweet scent, and her eyes fill with tears as she childishly goes up to one of the sunflowers, and lays her cheek against the soft brown velvet of the blossom, and kisses its golden petals. How Uncle Tom loved his sunflowers !

She looks round guiltily, for she hears footsteps. She hopes no one has been witness of her foolish sentimentality, and least of all her step-mother. But she it is who, with a black lace shawl hastily thrown mantilla-fashion over her head, comes sauntering down the path with the count in close attendance. She looks surprised at seeing her step-daughter, and gives no signs of having witnessed that little action of hers, yet Dolly knows she saw it, and the count too, for he gives her a smile of sympathy.

"What so natural as that a young girl should be sentimental?" he thinks. "Are not all the maidens in his own country brimming over with gushing sentiment ? Do not they all adore nature, and poetry, and all things beautiful ?" So he looks sympathetically at pretty Dolly, who stands there in the sunlight against a background of sunflowers, herself more beautiful than any flower, for she has a soul, and, if he mistakes not, a warm, enthusiastic soul, whilst——

"Count," Lady Travers interrupts his meditations—and somehow the usually dulcet voice sounds rasping —"those sunflowers would look admirable."

"Excellent," he answers ; and as Dolly, feeling herself *de trop*, turns to leave, he appeals to her : "Do you not think so, *mein Fräulein?*"

"I do not fancy the dear child knows what you mean," answers Lady Travers. "You will learn it all in good time, my dear ; at present it is a secret. Please, my love, see that Ferdie wraps up very warm ; he will be going out directly."

Dolly takes the hint, and departs to look after Ferdie, and attire herself for the afternoon's walk. She finds Rose and Lou inclined to be sulky about it, as they had meditated a last day's nutting and blackberrying; but the two boys are pleased and proud to take their new sister to see everything, and Ferdie is in one of his gracious moods.

So the little cavalcade starts, armed with baskets and crooked sticks, and the girls are not disappointed, for Dolly has lost none of her old nutting prowess, and she has the advantage of being taller and of quicker sight than either of them, to say nothing of her nimble activity, as she scrambles into the hedgerows and tugs down the branches.

Country-bred as she is, she has a whole world of knowledge, of which these half-foreign children know nothing. She can tell Ferdie the names of all the flowers she gathers him as they saunter along ; she knows the notes of the different birds that carol over their heads, and the habits of the insects that cross their path. Altogether, the boys think her, as they express it, "awfully jolly," and Rose and Lou begin to discover that a newly-found sister is not quite such a bore as they fancied she would be.

The time slips quickly by, and Dolly is amazed to find it half-past four when she fancies it is full an hour earlier. She ought soon to be thinking of making her way to the Lodge, but Mr. Ingram has not appeared, and she must go alone, unless Rose and Lou will accompany her. But they both stoutly refuse to do so, and Dolly, to defer the evil moment, makes one last assault on the nut-trees, and ensconcing herself in the midst of them, rains down the few remaining nuts on the children below.

Crash, crash, crash! go the branches behind her. What is happening ? Is a bull from the neighbouring field charging her ? or is some one arriving to order her to desist from her destructive work ? She looks round, to see the muzzle of a gun coming first, followed by a tweed suit, and Mr. Ingram seizes the branch at which she has been making ineffectual jumps, and bends it within her reach.

"Oh ! I am so glad you are come !" says Dolly simply. "I was just making up my mind to start by myself, as none of these naughty children will come with me."

Mr. Ingram smiles serenely. "I told you I would take care of you," he answers, "and introduce you to your aunt ; but I shall punish the children by making them walk to the Lodge with us. Do you hear, Rose ?" and Mr. Ingram steps out into the meadow, and hands Rose, who is stamping on her nuts, a knife wherewith to break them open.

"Oh, we will go to the Lodge with you," she responds, "only not into it. I detest Aunt Travers : she told me I was ill-mannered, and Lou that she was the worst figure she had ever seen. Papa says she is very vulgar."

"She gave me chocolate," says Ferdie ; "she saw at once what a nice little boy I was," and Ferdie pokes out his little hand to take hold of Geoffrey Ingram's and caress it, whilst with the other he pulls Dolly down to kiss him. "Do you know, Geoffrey," he says, "I love Dolly. She is an awfully nice girl, and knows, oh ! such a lot."

"Dear me, Miss Travers, I feel alarmed."

Dolly bursts out laughing—such a pretty, mellow laugh.

"You must not believe Ferdie, Mr. Ingram. I know very little. I have never had a governess or masters, or anything of that kind."

"What a blessing for you !" says Lou, and Mr. Ingram remarks that evidently her marvellous learning is the result of natural genius, and therefore all the more astonishing. So with much laughter and banter, kept up by Ferdie, they walk along, and Mr. Ingram finds himself by Dolly's side, sharing the instructions she gives Ferdie in answer to his ceaseless questions respecting the different objects of nature they pass. It leads the conversation to Holme Regis and Mr. Bruce, who has taught her so much ; and

Geoffrey cannot help thinking that the poor child has made on the whole but a sorry exchange, as she opens a locket on her watch-chain, and shows him Uncle Tom's shrewd, kind face—the face of a man to be trusted.

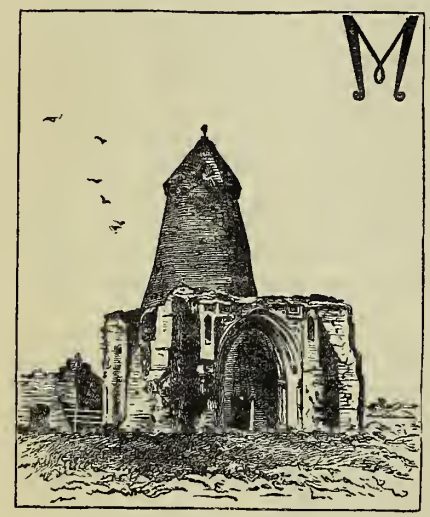
Joan meets them at the gate, as they reach the Lodge.

"I was just coming to fetch you, Dolly," she says cordially. "I am sorry I am so late, but as I have walked over to Croworth and back this afternoon, I dare say you will pardon me, particularly as I see Mr. Ingram has been so good as to forestal me. It is really too kind of you," she continues, turning to him; "you shouldn't listen to mother."

"It is a pleasure to me," he answers, "more especially if I have saved you an additional walk, after your seven miles;" and Joan's heart gives a bound, as she tells the children to go home, and conveys Dolly and Mr. Ingram into the house.

END OF CHAPTER THE SEVENTH.

THE NORFOLK "BROADS:" A HOLIDAY RESORT.



MEN spend much money and go far afield in search of sport, adventure, and picturesque scenery, and often overlook that which can be more cheaply obtained at their own doors.

There is a region which comparatively few are aware of, where fishing, shooting, sailing, and the charms which wildness and loneliness possess, are within easy reach. For the yachtsman and boat-sailor, there are 200 miles of deep and navigable rivers, broad, clear, and slow of current, with 2,000 acres of lake connected with the rivers. For the fisherman, the fishing in all these rivers, and in most of the lakes, is free, and the catches of bream and roach are counted by the stone-weight, and of pike by the score. For the naturalist the vegetation is tropical in its luxuriance, the heron, the snipe, the redshank, grebes, ducks, and waterfowl of every ilk are in abundance; and of all her products Nature is bountiful. For the sportsman, the shooting on all these miles of navigable river is open, and to the chief estuary the winter frosts bring thousands upon thousands of fowl, amid which the punt-gun may deal destruction. The scenery is that which fascinates by its space and its colour. It is flat, truly, but a large portion of the flat plain is water, which, whether its calm is blue as the sky and white as the clouds, or its storm has shifting colours which have no name, is always beautiful. Then there are forests of reeds, ten feet high, with purple feathery tops, which with flags and bulrushes rustle in the wind, and undulate like the waves of the sea. From lake to lake the wide rivers wander sinuously, and on their banks are fantastic windmills. Yellow iris flowers, beds of meadow-sweet, purple loose-strife, blue forget-me-nots crowd through the reeds to look at the white water-lilies, amid which the coots are swimming. Picturesque sailing barges with brown sails, and yachts with snowy canvas, are more frequent than houses, but when the houses appear they are embowered with trees, and have a delightful irregularity of outline, and the contempt for straight lines caused by marshy foundations. Then for wildness: the only way to effectually explore this district is by water, and as inns are few and far between, you must have a craft on board of which you can comfortably sleep. And in its lockers you must have great store of provisions, or you will have to fall back on the produce of your gun and rod.

Yachts of from five to ten tons, possessing a comfortable cabin to sleep two or three, and a forecastle for the man, can be hired, including a man, for from three to five pounds a week.

This El Dorado is within four hours' journey of London, yet even the title of this paper will give no idea to many where it is situate. It is the eastern part of Norfolk, with a little of Suffolk, and roughly speaking may be said to be a triangular stretch of country, with a base of some twenty-five miles along the sea-coast, and its apex at Norwich, twenty-five miles inland. Through this tract run three principal rivers—the Yare, the Bure, and the Waveney—and by following the course of these we can best give to our readers a picture of this Dutch-like country.

The Yare, as it twists through the city of Norwich, is narrow, and overhung with old buildings, which irresistibly remind one of the cities of Holland and Belgium. Below the city the river widens out into a noble stream, and hoisting the sails of our yacht, we glide on with a favouring breeze, past Thorpe, with its woods and gardens; Whitlingham, with its ruined church on the hill, and velvet glades between the trees; Postwick, and Bramerton, where there are low hills picturesquely clad with trees, and then we get out into the open marshland, where the breeze blows true as on the sea. Surlingham Ferry, with its group of trees around the house, is passed, and then eight miles from Norwich is Coldham Hall, a famous fishing hostelry, the station for which is Brundall. Here there are always yachts and wherries. The latter are peculiar to these waters; they are large, shapely craft, of from thirty to seventy tons burthen, of shallow draught, and propelled by one huge sail. They sail very fast, and

go to windward excellently. Their mission is to carry the inland traffic, and the men who have charge of them are, as a rule, very civil and obliging.

A genuine "Broad" landscape consists of water, marsh, gay with many-coloured grasses and flowers, windmills, and, moving about here, there, and everywhere, the high-peaked sails of the wherries. Yachts rigged wherry-fashion are very comfortable and handy craft. The windmills on the river-banks are not for the purpose of grinding corn, but for pumping the water from the marsh drains into the river, which is generally higher than the flat country through which it flows. The whirling arms work a turbine wheel which dashes the water up from the lower to the higher level. The old-fashioned windmills are now being supplanted by steam-mills, which drain a larger district more effectually, and are kept up by the various land-owners who are jointly served by a particular mill.

The fall of the river is only four inches to the mile, and the tide ebbs and flows nearly up to Norwich. The rise and fall of the tide, however, is very small, and the current is not fast, so that no better river for sailing can be found. Yachts can be safely moored close to the bank, in, if you choose, twelve or fourteen feet of water.

Snipes are very plentiful in the marshes near Coldham, and their curious drumming can be heard any day in spring and summer. In a wood close by there is also one of the small heronries which are not infrequent in the Broad district.

We have passed two small Broads, Surlingham and Rockland, but they are growing up very fast. Each year the reeds encroach a little on the water, and the decaying weeds add a little to the mud at the bottom. The Broads, as these inland seas are called, are all shallow, some of them extremely so.

As the day advances the wind freshens, and we speed faster; past Buckenham Ferry, another tree-encircled fishing station; Cantley, where the chief regattas are held on account of the great breadth of the river and the depth of the water, and where comfortable quarters may be obtained at the Red House; Hardley Cross, a stone erection connected with the jurisdiction of the river, and standing at the mouth of the small though navigable river Chet, which runs up to Loddon; and reach Reedham, a large village standing on a high bank. Here there is a railway swing-bridge which is open save at train time. Here is the entrance to the New Cut, a straight, wide canal three miles long, which connects the Yare with the Waveney, and is a short cut to that river. We keep on, however, for some miles until there opens out a magnificent sheet of water four miles long and of proportionate width. This is Breydon Water, and at its lower end we see the spires and towers of the semi-Dutch town of Great Yarmouth. The channel across is marked out by stakes at regular intervals, and we spin across in company with wherries, spritsail barges from Kent, shrimp-boats, sailing-boats, and gunning-punts, all anxious to make the most of the ebb. We have reached Yarmouth, twenty-six miles from Norwich, by river, and as we look back we see one of the marvellous and indescribable sunsets for which this flat land is famed.

The river narrows and bends southward for three miles before it reaches the sea, and it is on the narrow spit of land between the river and the sea that Yarmouth is built. Of its attractions we have not space to speak. Early in the morning, while the tide is yet flowing, we lower our mast, and pole or *quant* (the long pole used to propel the vessel when the wind fails being in Norfolk called a quant) up under two fixed bridges into the river Bure, and then we sail away north-westward through a tract of marshes which are rather dreary until we reach Acle. Two miles northward of this place lie the Ormesby Broads, containing altogether 800 acres, and famous for fish. There is another fixed bridge at Acle, but the mast swings in a tabernacle and is easily lowered and raised, a weight being attached to its lower end. The great masts of the wherries have a ton and a half of lead on the heel, and are swung with the greatest ease.

We sail on through a country increasing in beauty until we come to the mouth of the river Thurne, up which we go. You will often see the eel-sets, or places where the professional fishermen have a right of setting their eel-nets. A large boat with a hut built upon it forms their lodging, and with the nets hung out to dry forms a picturesque group. Overhead you will be struck by the number of hawks there are—kestrels and marsh-harriers chiefly.

Passing Heigham Bridge we come to Kendal Dyke, and turning into it, presently come to a very wilderness of reeds and water called Heigham Sounds; then through another similar Broad, called Whiteslea, disturbing great pike and other fish as we pass through the shallow water, and then the great expanse of Hickling Broad opens out before us. This is 400 acres in extent, but the shores are so low, and dim, and indistinct that it seems much larger. The water is brilliantly clear, and the bottom, which is only from two to four feet below us, is of yellow gravel. Of course, only boats of light draught of water can sail all over; others must keep to the channels, which are marked out by stakes. The skating here last winter was simply superb. This was the headquarters of the lateen-rigged yachts of light draught, which were formerly very numerous on these waters, but are now being superseded by the cutter-rig. A narrow but deep dyke bordered with tall reeds leads to a remarkably pretty and secluded Broad called Horsey Mere. From here the sand-hills on the coast are plainly visible; for at a distance of five-and-twenty miles by river from the sea we are yet within a mile and a half of it, and the ebb and flow of the tide is felt.

Returning to the Thurne, we sail up through Martham Ferry—where a pontoon or raft is made to stretch right across the river, removable when craft are coming—on to Martham or Somerton Broad, another lonely expanse of water and reeds close by the sea.

As night is falling, we may either drop our anchor in the middle of a Broad, or moor the yacht to the bank of the river where it may happen to be firm, and no one will disturb our rest.

Sailing back to the Bure we continue up its course, passing on the right the striking ruins of St. Benedict's Abbey, and enter the mouth of the river Ant, up which we sail for five miles, and reach Barton Broad, a splendid sheet of water diversified by islets, and bordered on one side by woods. Three miles further is Stalham Broad. The fishing on these waters is most excellent, and free. Stalham may now be reached by train from Yarmouth.

Back again to the Bure, and soon we come to Broad after Broad. On the left are South Walsham Broad, Ranworth Broad, well worth a visit, and two or three



1. THE BROADS BY NIGHT. 2. OULTON BROAD.

others. Then on the right, Hoveton Little Broad and Hoveton Great Broad, the latter a breeding-place of the black-headed gull; and on the left the two Salhouse Broads, where one may see the rarest beauty of wood and water.

A little further, and we turn in through a "gatway," and drop our anchor in Wroxham Broad, the most generally admired of all. It is deeper than the others, and always enlivened by the white sails of yachts. Here we are seven-and-twenty miles from the sea, and the river is navigable much further.

Now back again to Breydon Water, and on reaching the top of it we turn to the left up the river Waveney and into Suffolk. On the left at Burgh Castle are some Roman ruins which must on no account be passed by.

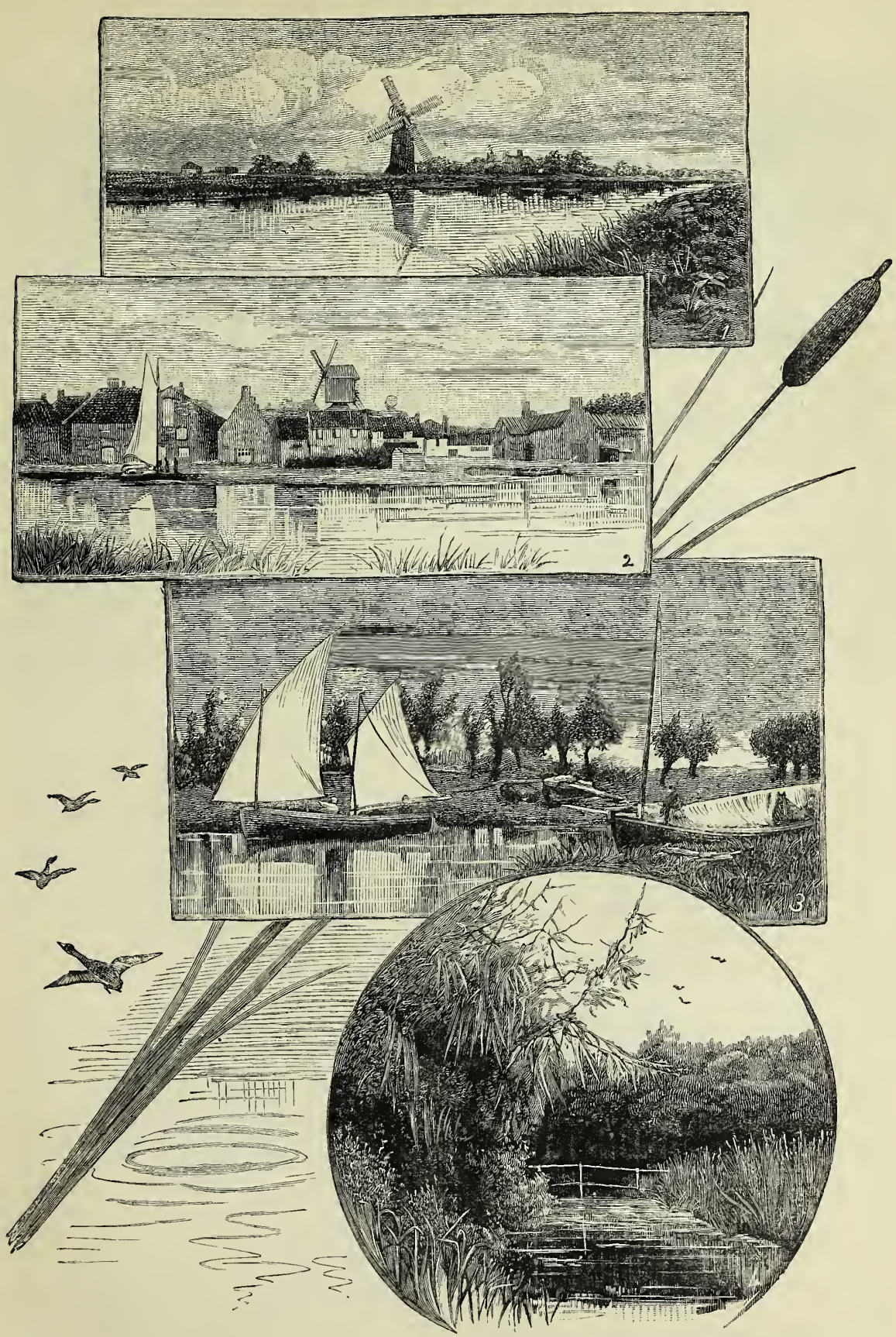
At St. Olave's we come to the other end of the Cut which left the Yare at Reedham. The river is an excellent sailing-river, being wide and very deep close to the banks.

A branch or dyke as wide as the river leads on the left to Oulton Broad, the gayest and most civilised of all because of the number of yachts and boats upon it. There are several inns in the village of Mutford at the lower end of it, where the visitor who has no yacht to be happy in will be most comfortably entertained. Boats, and tackle, and bait are all to be had here, and fish in abundance on the Broad. Lowestoft is a mile and a half away, and there is an outlet to the sea through Lake Lothing, which is connected with the Broad by a lock.

Up the Waveney one meets with a lovely sylvan country and good fishing, but no Broads. At Beccles, fifteen miles up, there is a fixed bridge, and the river is navigable many miles further.

This is but a meagre account of a district in which the writer has spent many happy days, but space forbids his enlarging upon it to the extent that he considers its due.

G. CHRISTOPHER DAVIES.



1. DRAINAGE MILL ON RIVER THURNE. 2. HORNING VILLAGE. 3. LATEEN-RIGGED BOAT—HICKLING. 4. DYKE, OFF THE BURE, NEAR COLTISHALL.





SOME HINTS TO PROPERTY BUYERS.

BY A SOLICITOR.

WE will waste no time or space by any introductory preamble, but at once plunge *in medias res*. We will say, then, that you are thinking of purchasing certain property, either for your own occupation, for an investment, or for speculative purposes merely. Before you do purchase such property, just bear in mind the following hints, some of which may be very useful to you, and may in the end save you not only time and trouble, but also considerable expense. Your first concern is as to the price or value of the property, what you can afford to give to yield you a fair return; this is arrived at by putting down the yearly rent of the premises, less deductions for repairs, insurance, ground rent, and any other disbursements you may know of; then, when you have ascertained the net rent, it is an easy matter to calculate what you will have to give to pay you a certain percentage. But you must be very careful that the amount of the rents as given you by the seller is correct. There is a practice often resorted to by wily and unprincipled jobbers, of increasing the rents of the property shortly before an intended sale, to give a fictitious appearance of value, therefore I would recommend you to see the tenants' rent-books personally, and notice how long they have paid the present rent, and how many times the same has been raised within a certain period. You will no doubt find an opportunity, whilst doing this, of having a conversation with some chatty tenant, who may give you information about the property which may materially alter your opinion as to its value.

If the property is new, see that everything about it is in proper working order, for sometimes owners have resorted to such mean deceptions as the putting-in of windows without cords or weights to save expense; placing lath and plaster over material defects in the walls, for the purpose of hiding such defects, and giving an increased value to damaged property. Also see that the surveyor of the district has given his certificate that the property is in a fit state, and ready for occupation. See that the property is properly drained, that gas and water are properly put in, you will also see that the accommodation at the back is all right. There are many other things of a similar nature which will no doubt strike you as being advisable to be seen to before purchasing.

Is the property freehold or leasehold? If freehold, ascertain whether or not there is any chief rent; and if leasehold, the length of the term of years for which the property is held, and how many years have yet to run; also get to know the exact amount of ground rent. It is well to know what kind of covenants there are in the original lease—are they ordinary covenants, or are they onerous ones? For instance, suppose you wanted the premises for the purpose of converting them into a tannery, or some other trade premises, it might be one of the stipulations in the lease that this trade (*inter aliâ*) should not be carried on upon the land comprised therein.

The amount of the rates should be ascertained, and who pays them, whether the landlord or tenant. You will know whether or not the paving and sewering are done, and by applying at the office of the local authority, the officials there will inform you whether same are paid for or not; in most towns printed forms are used for such applications. The items for paving and sewering amount to a considerable sum, even in small properties, and unless you made the necessary inquiry before purchasing, you might find yourself minus the amount of such "streeting account" when you came to reckon up your profits.

If the property is in an improving neighbourhood, or one which is deteriorating, these are, of course, material items in deciding as to the value of the property.

If a seller, for the purpose of assisting you to form

an idea as to the value of the property, produces to you the deed under which he holds, and points out the amount of purchase-money shown therein, and which purports to be the amount he paid for the property, be very careful that you do not rely upon this amount as a criterion of value, for in many cases property-jobbers, who are colleagued, assign property backwards and forwards from one to the other, and cause a fictitious amount of consideration money to appear on the deed for the purpose of misleading confiding and unpractised hands. The amount of a Building Society mortgage on the property is no absolute criterion of the value of the property, because these societies are in a position to legitimately lend more money upon the property than a private individual would be justified in advancing, as the principal money and interest are repayable by monthly instalments.

In case you are in the occupation of the property you intend to buy, and have worked up a good business connection there, you would be unwise to lose an opportunity of purchasing such premises simply because the amount asked might be £20 or £100 above its actual value to an ordinary purchaser, *i.e.*, one who has no special interest therein.

After you have thoroughly ascertained and sifted every fact and thing about the property, and after you have decided as to the price you are willing to give, it is always advisable to get a short agreement drawn up to bind the seller not only to prevent his withdrawing from the contract, but also to bind him by certain special and needful stipulations which you could not do without an agreement.

In case you are buying at a sale by public auction, besides having come to the sale-room armed with a full and clear knowledge of such matters as we have before hinted at, you should take special care to see that there are no objectionable paragraphs in the conditions produced at such sale. Before you attend a public sale, make up your mind what sum you intend to give for the property, and do not let the excitement of the auction room tempt you beyond that; take no notice of other people's bids which may tend to cry you on; they may be interested parties running up the value of the property. If you do make a rash bid, on the spur of the moment, unless the auctioneer at once takes it like a salmon leaping to a fly, and as quickly, you may still retract that bid before the hammer falls without having incurred any liability.

Where a person mortgages his property, and afterwards wishes you to buy his interest in the property (such interest being technically known as the Mortgagor's Right, or Equity of Redemption), be very chary what you do. An eminent judge has said, "It is a very dangerous thing at any time to buy Equities of Redemption, or to deal with them at all."

On the completion of the purchase, the seller should produce the receipt for the payment of the last half-year's ground rent, as evidence to show that the covenants in the original lease have been duly observed and performed up to that time.

If there are any existing rights, such as rights of way and of light, you should know about these before purchasing; for suppose the tenant of the adjoining property had, by length of time, become possessed of a right to have a window in his premises, which was objectionable in any way to the property you think of purchasing, either by destroying its privacy, or by preventing you building, it might considerably deteriorate the value of your property.

There are a great many other points I should like to mention, but want of space compels me to cut this article short. It may be that I shall have an opportunity of again occupying these columns with the same or some kindred subject. In conclusion I will give you an extract from an old fragment of legal poetic lore, which is:—

"These things foreknown and done, you may prevent
Those things rash buyers many times repent;
And yet when you have done all that you can,
If you'll be sure, deal with an honest man."

SONNET.

THE daintiest piece of sweetness that I know
Is standing now behind that curtain's lace;
Withdraw the curtain softly from its place
And you may see the sweet it screeneth so.
The sunniest head that ever caught the glow
Of sunshine on it; the most flower-like face
That ever made you dream a minute's space
Of orchards when the apple-blossoms blow.
Petite, *piquante*, and, ah! a sad coquette,
She makes you plead for kisses time untold,
And at the last denies you, and will fret
And purse her mouth, and bridle, if you scold.
She is my queen, and I her slave—and yet
This same coquette is only two years old.

ADA LOUISE MARTIN.



THE ART OF PAINTING ON CHINA.



POTTERY has of late occupied much of the attention, not only of those interested in its production, but of the public generally. There has been for some years past a demand for greater beauty, both of form and ornamentation, in the articles required for daily use. Artistic taste has been expended upon them, and novelties in shape, with ever-fresh combinations of colours, are constantly being offered at the numerous establishments to suit the endless varieties of taste, and meet the constant calls of fashion. Take, for instance, the divers articles adapted to the use of holding flowers alone; here may be seen baskets in imitation of Dolly Varden hats turned upside down, offering a tempting receptacle for the sweet wild flowers gathered in the country ramble among the corn-fields; brackets representing birds' nests, for embellishing the empty spaces on the walls, thrown up by velvet shields or reflected in glass plateaux; boats presided over by Cupids, suggesting at once the glorious water-lily as their most fitting occupants; and for vases, their forms are innumerable—tall and short, bowl-shaped and cylindrical; time and space alike fail us to enumerate the various styles that embarrass the choice of the bewildered would-be purchaser. But the rage for china does not end with useful articles. Those who cannot bring out of their treasure-stores, old Nankin, Dresden, Worcester, Chelsea, or Sèvres plates, dishes, and ornaments, may solace themselves with the assurance that modern china, well painted, is fast becoming as popular in its way as the more valuable "old china." There is one recommendation in the sight of modern china ornamenting our walls, there is no deception about it; it does not pretend to be what it is not, as some so-called old china that, were the truth known, was manufactured but yesterday. And, indeed, some of the plaques painted by our best artists find a place on the walls of royal palaces, and are well deserving of the honour, if we may judge from the high patronage bestowed on the exhibition of china held from year to year. The interest in these private and public exhibitions appears in no way to diminish, patrons and artists alike increase.

The mirror bought by the Queen last year was a fine example of the adaptability of china-painting to the ornamentation of articles in ebony, that would without its assistance appear heavy and dull. The clear white ground of the tiles, painted with delicately tinted flowers, served to lighten and throw up to great advantage the deep black of the chastely carved frame; an oblong piece of brilliant plate-glass, deeply bevelled at the edge, filled the centre space.



But the object of this paper being to give some information to those readers who have not yet learnt the art of china-painting, we turn now to consider the different styles of working; we shall, however, confine ourselves to over-glaze and under-glaze painting, leaving out of the question in the present paper the majolica ware, and also the lustre ware, that is unsuited for the amateur artist. We will first mention the articles required for over-glaze painting. The dry colours in glass capsules should be obtained in preference to those ready prepared in tubes. They can easily be mixed after a little practice to any required thickness, which is not the case with prepared colours; and they have not the disadvantage of becoming "fat" by keeping, which moist colours are at times apt to become, the meaning of which term will be given later on. All colours are the brighter for being fired as soon as possible after their mixture



with oil. The colours for over-glaze painting are entirely different from those used for under-glaze; in no case can one be made to take the place of the other, the enamel colours being in themselves glossy when laid on the china, while the under-glaze colours are dull, and are dependent on the subsequent glazing for their brilliance. China-painting, both over-glaze and under-glaze, can be worked with either water or oil; as it is our intention to give information on the use of both oil and water, we will mention the mediums necessary. A bottle of fat oil of turpentine, and some ordinary spirits of turpentine, will be required. It is just possible that in the case of our artists living in the country, or abroad, fat oil of turpentine could not easily be procured by them; the following directions for its manufacture are therefore given for their use. Ordinary turpentine is the only article needed. Pour a small amount into a cup and let it stand exposed to the air. This exposure will cause the evaporation of the spirit, and the fat oil will be left ready for use. More turpentine is added, little by little, as the spirit passes off. For water-colour, gum is generally used.

The brushes should be of sable for water, of camel's-hair for oil-painting; seven or eight will suffice at first for practice. One or two brushes called outliners are required for marking the strong outlines of the design. Two dabblers of different sizes should be procured, one small and the other large, for laying the background smooth and even. A china palette, a palette-knife, and a muller for grinding the colours are indispensable for the china-painter.

The plate, plaque, or tile must be carefully observed to see that it is as faultless as possible; any flaws will interfere with the painting, and if cracked ever so slightly, the piece will probably be returned from the firing in two parts, and both time and labour spent on it will thus be lost; its shape should also be true. The materials being now at hand, the drawing may be commenced. This should be done very correctly. A clever artist might sketch at once on the plaque or tile, but it is safer to make a drawing first, and then either copy or transfer it to the china. Porcelain, being the ware already glazed, will not take a pencil-mark, therefore the sketch must be made in Indian ink, or any other vegetable colour. To transfer a sketch, take the drawing and lay it on the tile in the position the sketch is to occupy, then slip the red or black transfer paper between it and the china, fastening down the corners with modelling-wax, gummed paper, or a piece of the blank paper that is often found on stamps when bought in any quantity; this will keep the design firmly in its place, and can be easily washed off when the drawing is completed. Go over the whole outline with a sharp-pointed pencil or agate point, then lift one corner of the paper to see if all the drawing is complete on the china. If so, the design is to be taken off the tile, and the whole outline pencilled out in water-colour carmine, or Indian ink. The design may be transferred without the use of the transfer paper, if preferred, by means of charcoal



or common rose-pink being pounced through holes pricked in the design at certain intervals; but this involves more trouble, and there being no fear of the transfer paper marks showing after the firing, it is best to employ it as the quicker method of the two. The outline should be kept clear and firm, but no great harm is done if the learner happens to get beyond it into the background space, as all marks in Indian ink will fire out; still, an outline badly done testifies that an uneducated eye and unsteady hand have been at work on it. We will suppose the design is composed of a group of flowers, and give a few hints respecting the manner of applying the colours. The explanation of the mixing of colours with the mediums shall have the first place, as that is, after all, the first real difficulty that besets the tyro in china-painting. In the case of water being employed, place as much colour on the palette as will be required, take a very little gum on the tip of the palette-knife, and rub down the colour with it, adding as much water as is necessary to make it work well. It is impossible in writing to give the proper quantity of gum, but the mixed colour can always be tested by allowing it to dry on the palette; if it dries shiny it will prove that too much gum has been used, and the colour would crack if fired; if, on the contrary, too little gum has been used, it can be known by passing the finger over the dry colour, when it will be found to rub off.

To mix the colours with the right allowance of oil may be found, on first trial, a rather more difficult performance; if, however, the directions given are closely followed it can be accomplished without any great fear of failure. It is very important to rub the colours down until not a trace of grittiness remains, otherwise the tint when fired will appear speckled; here the muller and glass slab will be in constant requisition. After placing some colour on the palette or slab, dip the point of the palette-knife into the fat oil, and grind down the colour with it until the oil is thoroughly incorporated, diluting it with turpentine gradually until it is of such consistency that it will work easily with the brush, then with the muller rub round and round, when it will become perfectly smooth without a grain of colour remaining unmixed; add more turpentine as it dries on the slab. No more fat oil should be used than is quite necessary to work the colour. Some patience is required in the mixing of colours, but it has its own reward in the evenness of the tint when laid. The same test as before may be employed to prove that the right quantity of oil has been used: allow the colour to dry, then if it is found to be very shiny it proves that too much fat oil has been used, and the consequence would probably be that, if the colour was used in this condition, when fired it would boil up or blister, showing little bubbles on the surface that would have to be scraped off and re-painted, which would effectually destroy the flatness of a tint besides giving double work to the artist. The same effect will be produced by the use of moist colours which have been kept too long. They were before mentioned as becoming too "fat;" when such is the case, the only remedy is to re-mix them by adding dry colour. The use of too little fat oil is, though not so disastrous in its consequences, to be discouraged, for on drying the colour will be found to be rough, and in an unpleasant state for working up with finishing touches.

The artist should choose a good light for the painting—a table placed near a window facing north is best—and a seat should be selected where the light will fall from the left hand on to the plate; the shadow cast by the hand will not then rest on the painting; if it does so, it will be found to render more difficult the execution of fine lines and finishing touches. A silk or foulard is the best material for painting in; the small loose particles that are found on woollen dresses and the dust that collects in them interfere greatly with the painting. Although the short hairy particles will fire out, they often leave a dark mark that cannot afterwards be eradicated; a needle or the point of a brush will best remove them. It is by far the easiest way to paint the background, should one be desired, before painting in the flowers and leaves; there is then no danger of spoiling the design, for should any of the background tint cover any spaces left for the flowers or leaves it can be easily scraped off with a penknife. Some persons paint over the entire surface of the plate with the background tint, and when quite dry, scrape out the spaces inside the Indian ink outline, leaving them by this means white, and ready for the colours that are afterwards to be laid on. There need be no fear of painting over the outline if sketched in Indian ink, as turpentine has no power of removing it because it is mixed with water. Others, again, paint the design and lay in the background afterwards; but it is a much more difficult plan, as in an intricate design the dabbler cannot be used, or if used in the larger spaces, it can only be done with great caution, for fear of touching the green tints of the leaves or spoiling the colour of the flowers. The colours must depend entirely on the flowers. With the exception of white flowers, that will look well on almost any tint, much of the success of the plate depends on a good contrasting colour being chosen. We will give a few suggestions on this critical point, reminding our readers that light-coloured or white backgrounds have the effect of causing all colours to appear darker by comparison, while dark or black backgrounds lighten the tint of the objects they are intended to throw up into relief. Iris, painted with purple royal mixed with blue to the correct shade, will blend with a yellow background, and form a rich piece of colouring. Forget-me-nots, again, look well with a deep blue background composed of a purple royal and blue mixture. Primroses will accord with a lilac background, daffodils with a background painted in azure-blue, while corn-flowers will bear a dark orange ground. Rose du Barry is a splendid colour for grounds; it is the same as that used in the Sèvres works. Celadon-green is also a beautiful colour for grounds; it is the tint of a duck's egg-shell, and harmonises well with many of the soft delicate flower tints. Mixed lilacs for grounds can be obtained ready

for painting in three different shades. Purple royal will mix with many colours ; brown, orange, or yellow mixed with it will give good shades. Greys are composed of mixtures of brown and blue ; brown, green, and blue ; and of brown, green, blue, and pink. These mixtures will agree with any coloured flowers, and as they do not interfere with their tints, they are always safe to use. Mixed backgrounds can be formed of many colours, and when well selected are very soft and pleasing in their effects. For example, a mixture of blue and pink will give a mauve or warm grey, according to the proportions used ; it should be applied very thinly if a delicate tone is required. Blue and green, as also brown and green, will produce various useful shades.

The colour being selected and ground finely on the slab, add a few drops of oil of aniseed to prevent it being too quickly absorbed by the china—sufficient for the entire wash must be ready before commencing—then take as large a camel's-hair brush as it is convenient to work with, and wash over the whole groundwork quickly with light sweeps of the brush, keeping the hairs flat and open ; then take the dabbler and, holding it upright, dab rapidly and evenly over the entire surface, which will cause the colour to dry smoothly. The dabbler must on no account be used if it is not perfectly dry, and the process must not be continued too long, for on the paint becoming drier it will only serve to draw off the colour if the dabbling is persisted in. Still, the longer the dabbler can be used without drawing off the paint the smoother will be the ground ; experience will soon teach how long it may be employed before the paint dries. Some dispense with the dabbling process altogether, simply laying in the washes with the brush alone, preferring that their backgrounds should not be too smooth. A flat tint should be washed in first, and the hatching worked in of the same tint, or other tints may be broken in to heighten or lower the effect as may be deemed expedient.

Ground-laying is performed by quite a different method ; its object is to lay a perfectly smooth and even tint. The plate is washed over with grounding-oil, the depth of the subsequent colouring being dependent on the thickness or thinness of the oil coating. After laying on the oil let it stand, protected from dust, until it is partially dry ; try it by touching it lightly with the finger. When it is somewhat set it is ready for the further operation of bossing. Screw up a piece of cotton-wool, cover it with three or four layers of fine linen, leaving sufficient length to hold it by, then again cover it with leather or silk ; this is used as a dabbler for smoothing down any raised lines left by the brush when coating the plate with the oil. Now dip a piece of cotton-wool into some dry finely-ground colour, and dust it over the plate until every part of it is coloured, and until the oil will not absorb it any longer ; any colour that will not adhere can then be dusted off with a flat wash-brush or softener, perfectly dry and clean. Set the plate aside when the background is finished until it is thoroughly dry, as the least touch or finger-mark will show, and once a background is marked it can never be patched up again satisfactorily.

Now set the palette with the tint for the flowers and the shadow-colour. A pearl-grey shadow-colour can be obtained ready mixed, or it can be mixed by the artist by means of grey-black, blue-green, or soft turquoise and orange ; this makes a shadow-colour for white. Lay on a tint of the flowers, adding shadow for white where a pearly-grey tint is necessary, leaving the lights in pure china. It is easier in small flowers to paint over the whole, and to scratch out the lights with a penknife ; either plan is equally good. Then set a palette with green for the leaves, wash in the lights with yellow or pale green tints, then the deeper shades of green and reddish-brown, according to nature. Keep each tint at first in its separate place, then soften them down with shadow-colour where it is found. If the whole leaf were first washed in with green, and the lighter or darker tints placed over it in those parts that require them, the result would be an unevenness of texture, and those portions of the leaf would appear heavy in comparison with the rest. A great variety of green is produced by mixing blue and green, brown and green, or yellow and green. Those who are accustomed to water-colour drawing will doubtless be surprised that blue and yellow are not mentioned for producing greens, but these colours do not give clear greens in ceramic colours ; if used, neutral shades of green will be the consequence. Blue-green is useful for sprays of leaves seen in the distance, and with the addition of grey-black forms a very desirable tint. Rose-leaf green is also a most serviceable colour for the palette, as it will assist the artist in producing the greens of autumnal tints when mixed with carmine and purple, soft blue-greens when mixed with azure-blue. It will also combine with brown, or yellow, or orange, so that the variety of shades of green composed with this green as a foundation are almost endless. The stems of a rose-branch will require outlining with rose-colour and brown, and the thorns must be marked out in rose-colour. As a second firing is almost always indispensable, it is best to leave the finishing touches until after the plate has been once fired. When returned from the kiln some colours will be found probably to have faded ; these require re-touching. This is often the case with some of the browns ; greys, however, do not alter much, therefore they must be used sparingly. Carmine should be laid on in a thin wash, as otherwise it is likely to turn yellowish in the kiln. The first firing being accomplished, it only remains for the touching up and the finishing touches to be added. The darker shades may require deepening, and the dark touches on the buds should be put in. Shadow-green will be needed, or a shadow-colour can be made of brown and green, for the deepest tones of green. The darkest touches on the stems will require brown, or brown and red ; thorns must be darkened with ruby. An olive-green may be composed of green, brown, orange, and red. Purple-brown is useful for outlines. Some artists outline their entire sketch at last with it after the shading and finishing touches have been put in.

HOW WE SAVE TIME AND LABOUR.



GEORGE STEPHENSON'S BIRTHPLACE.

HERE is a certain phrase much in use amongst political economists just now — "The maximum of result with minimum of effort." We might call it trade's text, and we might call our great industries illustrations of that text. In these noisy, busy days, when every man seems to work more intensely, and every wheel seems to go faster, and when one would imagine that the very earth was turned by steam, it is not always easy for us to stop to perceive how much work we are all the while saving. In a page or two it may be possible to indicate the labour-*saving* tendencies of this laborious age.

Strength is like a tool, good for much or little as the handler is good for much or little. The pen that with a hard day's work earns the clerk a few shillings might, in an artist's hand, produce fifty pounds with a few scratches. People pay far less for what they see than they pay for what is not seen. When they buy a book, they get more than paper and print; when they pay thousands for a painting, they buy a few square feet of canvas, paint which may have cost a shilling or two, stucco and gilding, *and* brains—with which Opie and all his fraternity mixed their colours. Those who have no brains become machines in the hands of those who have brains. The simple labourer plods on his way on foot; but the man of brains comes riding past, and gives him a seat behind him. The farmer who gathers his twenty or thirty men of a morning, and sends them about various kinds of work, has been thinking for every one of them, and so has saved each a certain amount of time and trouble. Brassey, in the course of a forenoon, thought and wrote enough to keep large armies of workmen steadily engaged for many days. Or look at London. The proverb has it, "All roads lead to Rome;" but trade snaps its fingers at that old-world saying; all roads lead now-a-days to London. When Londoners speak of the City, they mean a cluster of streets and buildings that may easily be traversed from side to side in a few minutes. The City is like the heart, or better say the brain, of the world. In that subdued, intense hum, you hear the world thinking. Nothing but thinking goes on here. No bales of cotton, no chests of tea, no sacks of grain, no loads of timber are to be found in the City—few workmen of any kind, only those who can think. These City men do most of the thinking for the great companies of the world—the railway companies in the far West, or in Russia, or in India; the submarine telegraph companies; the trading companies in North America, or in Africa, or on the Nile, or in China and Japan; the gas companies and the water companies in Berlin, or elsewhere; the ocean steamship companies; the mining companies; and hundreds of such schemes. Now, the world pays these men to think, and pays them better than any others, because they really do the most work and save the most time—best exemplify the maximum of result with the minimum of labour.

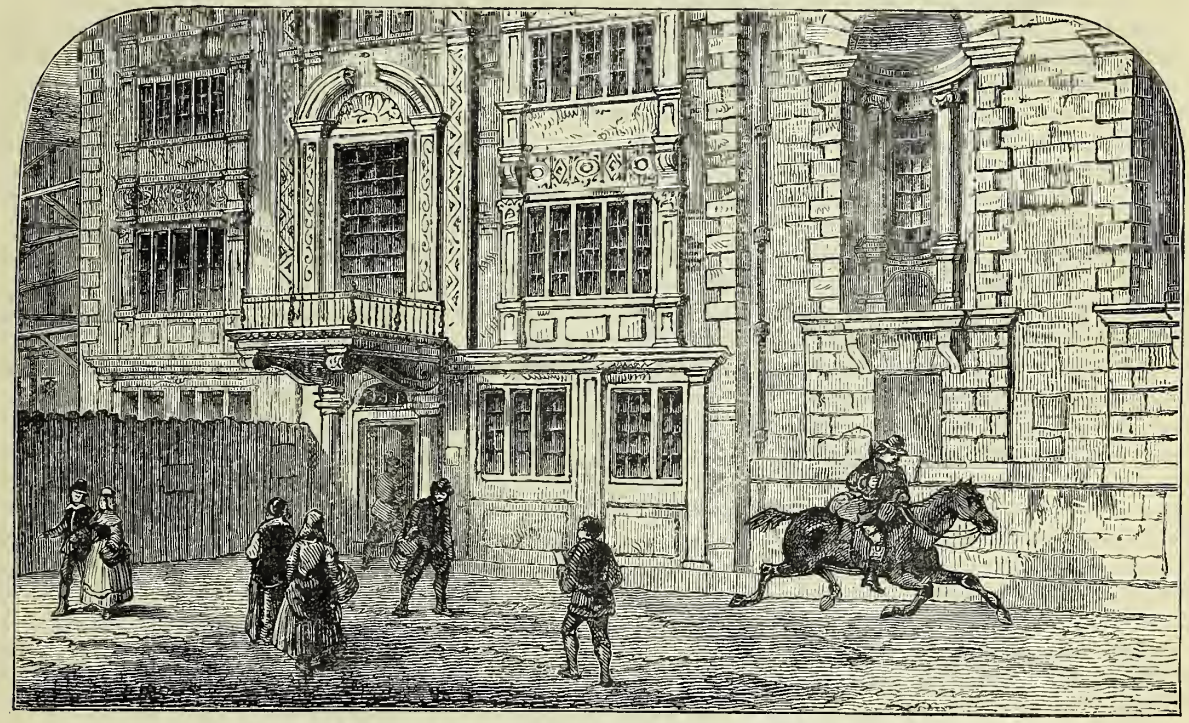
Turn now to the work of still stronger, though not always more highly-paid, thinkers. By the agency of science coal is taught to spin, weave, dye, print, and prepare silks, cottons, woollens, and other cloths; it makes paper, and prints it when made; it converts corn into flour; it presses wine from the grape and oil from the olive; it draws metal from the bowels of the earth, pounds it, smelts it, melts it, moulds it, forges it, rolls it, twists it into any form the imagination can devise. A bushel of it can be made to do the day's work of 200 stage-coach horses. The Great Pyramid of Egypt measures 700 feet across the base, and is 500 feet high; its construction employed 100,000 labourers for twenty years, and it is the puzzle of history to divine the means employed to raise the enormous blocks of stone. Now we know that the whole of its materials might be raised to their present position, at the expense of not more than 480 tons of coal. The Menai Bridge consists of about 2,000 tons of iron. It is said that its whole mass might be raised from the level of the water to its present height—210 feet—by the combustion of four bushels of coal!

Consider what science, with iron, and coal, and steam for helps, accomplished for us in the railway alone. "Man," says Carlyle, "digs up certain black stones from the bowels of the earth, and says to them, 'Transport me and my luggage at the rate of five-and-thirty miles an hour;' and they do it." In 1671, Sir H. Herbert, speaking in the House of Commons, said: "I honestly confess myself an enemy to mad, visionary schemes, and I may be permitted to say that in the late King's reign several of those thoughtless inventions were thrust upon the House, but were most properly rejected. If a man, Sir, were to come to the bar of the House, and tell us that he proposed to convey us regularly to Edinburgh in coaches, in seven days, and bring us back in seven more, should we not vote him to Bedlam? Surely we should, if we did him justice. Or if another told us that he would sail to the East Indies in six months, should we not punish him for practising on our credulity? Assuredly, if we served him rightly." It was perhaps well for James Watt that Sir H. Herbert did not live in his day! Who has not heard of the ridicule cast by the *Quarterly Review* for March, 1835, upon a proposal to carry passengers from London to Woolwich in steam-

coaches, at the rate of eighteen or twenty miles an hour? "We should as soon expect"—these were its words—"the people of Woolwich to suffer themselves to be fired off upon one of Congreve's rockets as trust themselves to such a machine, going at such a rate."

And now sixty miles an hour is daily attained by certain trains! We smile as we read these words of Smith: "A broad-wheeled waggon, attended by two men, and drawn by eight horses, in about six weeks' time carries and brings back between London and Edinburgh near four ton weight of goods." Thus what he took to be the hare we discover to be the tortoise.

The railway has been the great civiliser, the great time-saver of the age. But the sister—the electric telegraph, sharp, quick-witted as her brother is powerful—has done nearly as much for us. The two have always worked hand in hand. It is curious to observe how what is often regarded as chimerical in one age becomes reality in the next. "Strada," says Addison in 1711, "gives an account of a chimerical correspondence between two friends by the help of a certain loadstone which had such a virtue in it that, if touched by two several needles, when one of these needles so touched began to move, the other, though at ever so great a distance, moved at the same time and in the same manner. He tells us that two friends, being each of them possessed of these needles, made a kind of dial-plate, inscribing it with twenty-four letters, in the same manner as the hours of the day are marked upon the ordinary dial-plate. They then fixed one of the needles on each of these plates in such a manner that it could move round without impediment, so as to point to any of the twenty-four letters. Upon their separating from one another into distant countries, they agreed to withdraw themselves punctually into their closets at a certain hour in the day, and to converse with one another by this their invention. Accordingly, when they were some hundred miles asunder, each of them shut himself up in his closet at the time appointed, and immediately cast his eye upon the dial-plate. If he had a mind to write anything to his friend, he directed his needle to every letter that formed the words that he had occasion for, making a little pause at the end of every word or sentence, to avoid confusion. The friend, in the meanwhile, saw his own sympathetic needle moving of itself to every letter to which that of his friend pointed. By this means they talked together across a whole continent, and conveyed their thoughts to one another in an instant over cities and mountains, seas or deserts." A curiously prophetic dream this. Now we send our thoughts, not only through cities and over the hills, but under the sea. Even when our theory of telegraphy was tolerably perfect, it was for long considered a feat to communicate along a wire twenty miles long; and this could only be done in very dry weather. In the present day we pass messages through 2,500 miles of wire without a break. The result of the last Derby was telegraphed from the course to New York in a few seconds. You can order your hamper of wine from the London merchant in three minutes for a shilling; soon you may do it for sixpence. Many London housewives order their butcher's-meat or their groceries by means of district telegraph wires, the cost of the operation being so small that the tradesmen gladly bear it.



THE OLD POST-OFFICE IN LOMBARD STREET, ABOUT 1800.

"If," says the projector of an "accelerated post-service," in 1635, "anie of his Mats subjects shall write to Madrill in Spain, hee shall receive answer sooner and surer than hee shall out of Scotland or Ireland. The letters being now carried by carriers or foot-posts 16 or 18 miles a day, it is full two months before any answer from Scotland or Ireland to London."

A vivid glimpse of posting times before this is gained in a letter of Tuke, Postmaster in the time of Henry VIII. "As to postes betwene London and the courte, there be now but 2, whereof the on is a good robust felowe, and was wont to be diligent, evil entreated many times, he and other postes, by the herbigeours, for lack of horse rome or horsemete, withoute which diligence cannot be. The other hath been the most payneful felowe, in nyght and daye, that I have knowen amongst the messengers. If he nowe slak he shalbe changed, as reason is."

As soon as regular posts were established, the people were glad to support them. Cromwell farmed the Post Office for £10,000 a year; Charles II. farmed it for £21,500 a year. In the next century, when mail coaches were introduced, the number of letters passed through the Office in a certain year was 75,907,572; and the net profit upon carriage was £1,659,509. We all know what increase even upon this large traffic the Penny Post brought. One curious and beneficial result not contemplated by Sir Rowland Hill when he introduced stamps was their use as a medium of exchange. Bankers disdain the copper, but Government has issued a paper currency representing the despised coin, and that currency is in large circulation among the humbler classes. I believe the number of letters passed through post offices last year amounted to about 600,000,000.

The perfect economy of machinery on which we pride ourselves in this country is the strongest proof of our vehement desire to save time. The amount of time spent—often apparently wasted—in the very endeavour to *save* time is incalculable. When Howe, instead of earning a fair mechanic's wage, spent years in the most abject poverty conning the problem of the sewing-machine, most people looked upon him as a very unproductive member of the community. But who can tell how many seam-stresses' lives would be worn out in performing the work one of his machines does in a year or two? The wheel, the lever, the pulley, or the wedge enables a single man to do what twenty men might not do without its aid. When we spread the sails of the windmill, we simply set the air to do work; and it does it, with scarcely any attention on our part. When we construct a water-wheel, we are enabled with it to make the patient stream save time for us night and day if we will. The knotted root of a tree might be divided by a stone, better by a knife, a hatchet, a saw, a wedge, but best by gunpowder or dynamite. Each of these methods exemplifies improved economy of labour and time. We have so long been accustomed to use constantly the most complicated and costly machinery that we often forget what we owe to it, as well as to that which is simple and cheaper. The truth is, we cannot snuff a candle, mend a pen, cook a pudding, without resorting to machinery or tools of some sort. Our civilisation and prosperity as a nation are largely the result of the perfection our insular position has enabled us to bring machinery to. What has enabled us to avoid the increase of public debt so many great economists predicted for us, but our improved means of production? While our population has increased, our skill has increased, thanks to such men as Hargreaves, Arkwright, Watt, Wedgwood, Crompton, and Cartwright. It was said, forty years ago, that by means of improved machinery an individual could produce then 200 times the quantity of cotton goods one was able to furnish at the accession of George III., in 1760. It is not going too far to say that we have derived ten times the advantage from the spinning-jenny and the steam-engine that we have obtained from the conquest of India, though by this latter we added nearly 100,000,000 subjects to the Empire. I have seen it stated that the Indians of South America have no other method of making cloth than by taking up thread after thread of the warp, and passing the woof between them by the hand. Thus they are engaged for several years in the weaving of hammocks, coverlets, and other coarse cloth articles, which a European loom might turn out in a few hours. It was not by chance the Greeks ascribed the arts of spinning and weaving to Minerva; they are among the most honourable testimonies to the sagacity of mankind.

Take a few of science's advances in this century alone. A certain Mr. Isaac Holden, lecturer on chemistry, having bethought him of means to insure the quick lighting of a candle, since at four in the morning—the hour he rose at for study—flint and steel proved somewhat irritating, succeeded in uniting wood with chemicals long known to be capable of affording instantaneous light. He mentioned his experiments and their results to his class. One of his students communicated to his father, a London chemist, the information thus given, and lucifer-matches were shortly in the hands of all. One manufacturing firm alone now produces 3,000,000 matches every day.

We have already mentioned the railway, the telegraph, the penny post: the year 1800 had not heard of these. Since then we have been presented with india-rubber and gutta-percha articles; ships have been furnished with screw-propellers; photography has taught us how ugly we are; gun-cotton has shown us an easy way to destruction; steam-ploughs, and reaping-machines, and raking-machines, and road-engines, and tram-cars, and pneumatic tubes have unfolded their powers. England is within ten days' travel of America; we have touched the magnetic pole; Egypt has been disinterred; planets have been discovered; our ancestry has been alarmingly traced; our earth has been proved older than was supposed by some 20,000,000 years. In 1812 the *Comet* was the only steam-ship plying in the United Kingdom—now we have a fleet of some 3,000. Of turnpike roads, canals, railways, there have been formed over

130,000 miles. Montgolfier, studying his coffee-pot as Watt did his kettle, practically founded what is worthy to be termed not only the art but the science of aëronautics, capable of great things in the future. Our fathers cut their own pens out of goose-quills—now we obtain annually from Birmingham alone at least 1,000,000,000 metal nibs. A needle once cost as much as a shilling—that coin to-day buys 100 of the best. Think of the Menai bridges, the Fribourg bridges, the St. Lawrence bridge, the Forth bridge! That good old gentleman we mentioned a little ago, Sir H. Herbert, when he made the remarks quoted, had risen in the House of Commons to denounce as chimerical a scheme to bridge the Thames at Putney!

In 1801 the quantity of raw cotton consumed in this country was 54,000,000 lbs.—now it approaches 2,000,000,000 lbs. In 1860 Mr. Samuel Maverick, of South Carolina, who assisted in packing the first bag of cotton sent to Liverpool from America, was still living—he may be alive yet. In that same year, 1860, the number of exported bags was computed by him to be 2,500,000. I heard it said lately that the civilisation of the country might be computed by the amount of sulphuric acid it consumed. The powers of sulphur are the discovery of this century; it is the great requisite for colour-making in all forms, dyeing, paper-making, bleaching, medical preparations, instruments of war, and many arts. With sulphuric acid the chemist makes nitric acid, hydrochloric acid, phosphorus, chlorine, and many other things. Not so long ago sulphuric acid was half-a-crown per pound—now it is a penny.

But lately we have learned to utilise much that was regarded as refuse. Glycerine was looked upon by chemists as a nuisance, to be got rid of at great expense—now it is the most valued friend of the candle-maker, and is likewise used by the dispensing chemist. Soda, formerly made from Highland kelp and Spanish barilla, is now to be got in unlimited quantities from ordinary sea-water. Bones are ground into manure. The refuse of gas-works furnishes ammonia; and from the same source we obtain carbolic acid and aniline dyes. Old rags form some of our most beautiful furniture. A church in Norway, adorned most elaborately outside and inside with statues and Corinthian capitals, is composed entirely of papier-maché.

Aluminium was discovered in 1827. Although it is yet a most expensive metal, the fact that its oxide is the chief ingredient of all common clays inspires chemists with the hope of making it "as cheap as dirt."

In navigation, science has made rapid strides during the last eighty years. Wind and tide charts, deep-sea sounding, and the like, have been skilfully executed. The compass, more particularly in iron ships, is being made more truthful every year. The *Sirius* and the *Great Western* achieved the passage of the Atlantic just as Lardner had finished to his own satisfaction a proof that such a passage was impossible. E. S. R.

CHILD OF THE CITY.

CHILD of the city, drooping flower,
With wistful eyes and mournful brow,
I've sought through many a lovely bower,
Yet found no sweeter flower than thou.
I love thee more because thy cheek
Hath oft been dimmed with sorrow's tears,
And hush my heart to hear thee speak
With wisdom far beyond thy years.

Child of the city, captive bird,
Caged in the busy mart all day,
Where trill of thrush is never heard,
Or soaring skylark's rapturous lay,
As soars the lark from worldly things,
Thy pure thoughts soar beyond the stars;
Poor fluttering bird with tender wings
That feebly beat thy prison bars!

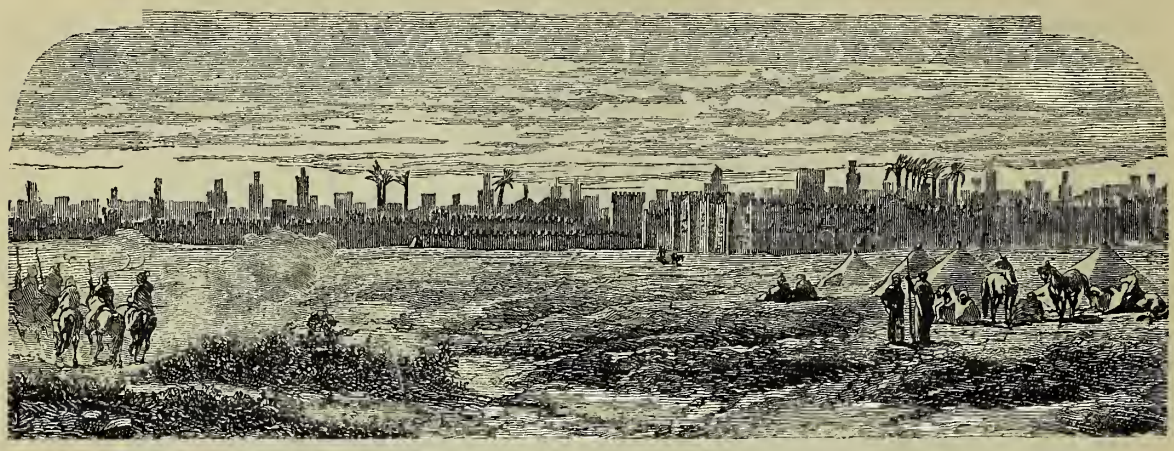
Child of the city, not for thee
The thousand joys to childhood dear;
Thy longing eyes may never see
The leaves, the young fresh leaves, appear.
The buoyant hope thou mayst not know
That thrills the little rustic lass
Who stands, with sun-kissed face aglow,
Knee-deep amid the whispering grass.

Child of the city, in thy dreams
Fair smiling fields, green winding lanes,
Fresh summer winds, bright glancing streams,
And children weaving daisy-chains,
Are all thine own: thy weary feet
Half fearful press the wondering flowers;
Nor memory dark of crowded street
Dares to invade those rapturous hours.

Child of the city, from the trees
Laden with bloom the blossoms fall;
In fairy music sings the breeze,
And from the woods the wild birds call.
The sunlight falls like golden rain
From the unclouded sky above,
While Nature sings one heavenly strain
Of grateful joy—"Oh, God is love!"

Child of the city, worldly wise
Ere yet thy life hath reached its noon!
Sweet pensive brow, sad wistful eyes—
Wee world-worn heart grown old so soon!
Be patient still, be strong, be brave,
All shadowed though thy lot may be;
Fix all thy hopes beyond the grave,
Where flowers immortal bloom for thee.

FANNY FORRESTER.



VIEW OF FEZ. (*From "Morocco and its People.'*)

THROUGH MOROCCO TO FEZ.



LANDING AT TANGIERS.

THE conference recently held at Madrid has at any rate shown a great number of people that Morocco is a strange country, and that the natives are given to outrage. The atrocities perpetrated some weeks ago told us that the consular protection is of a very anomalous character, and has been frequently abused. Public curiosity respecting the country has been already stirred, so in the following pages we propose to give a brief description of Morocco, its people, and the chief places within its borders. The easiest way to reach Tangiers is from Gibraltar, and we will therefore at once cross the strait.

What a contrast! Behind us we have left the bustling rock, crowded with British troops, and bristling with cannon. On all sides civilisation and evidences of a Christian community are observable; cross the tumbling water and all is changed. You are in an unknown land. Three short hours have made the difference. Civilisation is ignored; a Christian, if not openly regarded as an enemy, is suspected; and Europe is morally and physically the opposite land. Even the landing is different, for we are carried ashore on the backs of half-naked Arabs, our chins perchance resting upon their polished skulls, and our toes dipping into the water.

The first thing that will strike the visitor to Morocco is the peculiar aspect of the natives. Everything about them is strange. Their dress, their attitudes, looks, the dreamy expression on their faces, their bare metallic-looking skulls and fixed eyes, combined with their cloaked appearance, gives them the aspect of a colony of spectres or of a Dominican brotherhood let loose. And the streets are quite in keeping with the population. The city of Tangiers is simply a labyrinth of lanes, crooked and not clean. The houses are square, white, and windowless, half convent, half prison, with doors so small that entrance is not easy: domiciles fit for "hide and seek" rather than for residence, and redolent of garlic, fish, and other odours, all the houses wearing, like their owners, the weary air of mystery and *ennui*.

The first appearance of Tangiers, therefore, is certainly not cheerful to the late sojourner at Gibraltar. Nor can the visitor amuse himself, or rather herself (for ladies like shopping), by gazing at windows and appraising wares. The shops are mean to a degree. Those in the only square, around which are the various legations, are wretched. Here is the well-defined shore upon which the sea of barbarism breaks — a line of civilisation merely. The rest is all barbaric—a dead sea of unknown extent.

But if the aspect of the city be dull during the day, what shall we say of it at night? Fully illuminated by a refulgent moon, which lights up the white walls with almost dazzling splendour, Tangiers is a city of the dead. The cloaked spectres have disappeared into the whited sepulchres—the houses. A bundle of rags will stir at your feet: it is an Arab! You tread upon the skeleton of a cat and recoil. Your footsteps echo in the deserted lanes, and probably the beating of your own heart will be all the sound you will hear. All is mute and lifeless around you.



OUR FIRST MEETING WITH THE SULTAN. (*From "Morocco and its People."*)

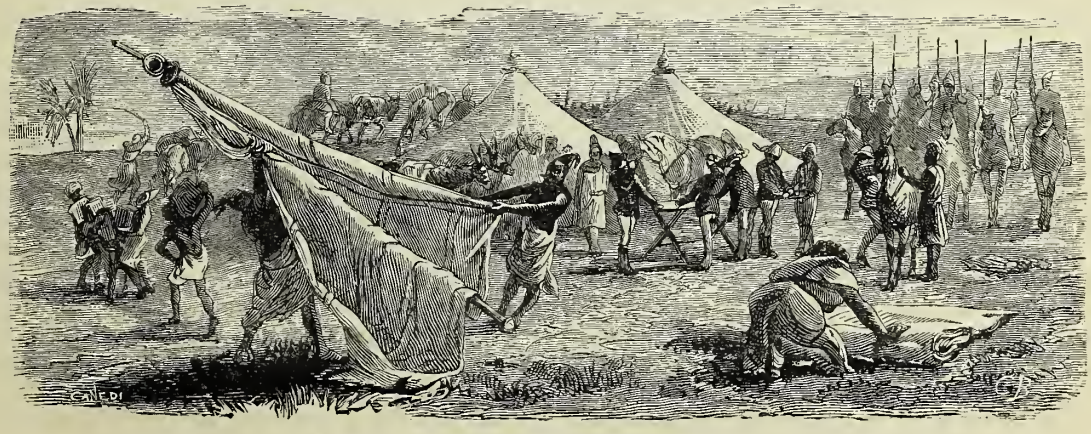
Apropos of the "bundle of rags" we mentioned above, nothing will surprise the visitor to Morocco more than the extraordinary manner in which the native will curl himself up in a corner or lie down against a wall. In a spot where we should fancy a boy or a bundle would find insufficient and uncomfortable space, an Arab will sit or crouch in perfect happiness. "He spreads himself on a wall like a bas-relief, and flattens himself upon the ground like a sheet spread out to dry." And in all these attitudes he appears alternately headless, legless, or trunkless, a ball, a cube, or a nondescript. His adaptability is wonderful.

Let us glance for a moment at the different races occupying the country and their mode of government. There are about eight millions of inhabitants —Europeans, Arabs, Jews, Berbers, Moors, and Negroes. The Berbers, who are really a savage tribe, dwell near the Great Atlas, and are quite independent. The Arabs—the conquering people—occupy the plains, while the Moors hold the wealth and commerce of the country in their hands. The Negroes are servants, soldiers, or labourers. The Jews, numbering about half a million, are here detested to the full, but manage to make money and to wring a subsistence from the hands that persecute and oppress them. The Europeans are very few, and they are obliged to live under consular protection.

The government is military, and is chiefly exercised in extracting all it can from the miscellaneous population. Tribes are obedient to sheikhs, cities or provinces are ruled by cadis, then the pasha, and finally the Sultan, have the upper hand. So under such a government, or organised system of oppression, everything that grows up fades, withers, and dies, killed by savage fanaticism. Commerce is choked, manufactures are restricted to the old Moorish methods. Agriculture is equally hampered; education is thrust out: there are no books, nor maps, nor printing-presses, and the language itself is as corrupted as the national character. This is what is left of the once proud seat of a glorious monarchy. Ichabod, Ichabod! The glory has indeed departed!

The dress of the people is very picturesque. That of the men is ordinarily a white mantle, but on gala days is more elaborate. The women cover their faces with the end of their long mantles, under which they wear a wide-sleeved garment, bound round the waist with a cord. Nothing but the eyes, fingers, and bare feet thrust into slippers are visible. They are a sad, weary race, prized till twenty, then they get old and withered, and are treated like beasts of burthen till they die.

It is somewhat curious to remark that lunatics or idiots are considered saints in Morocco. This supposition arises from the accepted idea that Providence has withdrawn reason to keep it in heaven, and generally throughout North Africa this is accepted as a proof of sanctity. These saints are at times mere impostors—men who assume an idiotic manner and action in order to benefit by the holiness that attaches to lunatics. They take strange liberties, however; and



STRIKING THE TENTS. (*From "Morocco and its People."*)

to receive a blow from a stick or to have the "saint" spit in your face are privileges which, however greatly prized by the natives, have not yet found favour in the eyes of Europeans. These prejudices may in time wear off; at present the feeling is rather in opposition both to the actions and to the odour of sanctity in Morocco. Such a welcome as we have referred to is by no means uncommon, and the Christian is regarded as very fortunate if received by a blessed saint who may have spat in his face.

There are many interesting features about Tangiers had we space to dwell upon them. We may mention a few of the most striking. One certainly might expect conveyance, but in the whole town there is not a cart nor a carriage. No itinerants go round with wares, no street occupation absorbs the pedestrians, no movement to speak of, no bells, no cries, no invitations to purchase. Repose has settled upon all; even the active-minded visitor will succumb at last, and sit for hours doing nothing, not knowing what to do. And in this somnolent city you can wander about at will, and will lose yourself, no doubt, in the hopeless maze of little houses and lanes and alleys. Every lane is like every other lane, all the alleys and tiny squares are *fac-similes* of other alleys and squares, and one might very easily disappear never to return. This is all the more curious as the whole place could be built up, with plenty of land surrounding it, in half Kensington Gardens; and in this labyrinth you may as a Christian wander unharmed and almost unnoticed. No pickpocket of civilisation will molest you, and European women might carry their purses in their outside pockets without fear of loss.

There are various religious ceremonies which will bear description, one of which, the entry of the "Aissawa," is very popular. The Aissawa is a religious fraternity, and they keep alive the fervour of devotion by various exercises, which break out in dervish fashion into extravagant manifestations, such as dancing, leaping, yelling. These simple exercises soon expand into a sort of madness, and when under the influence of this great excitement they will burn themselves with hot coals and gash themselves with knives, as did the prophets of Baal in their frenzy. Under these circumstances they are quite irresponsible for their actions, and will seize and devour raw any small animals in the streets, and finally fall down insensible. Such are the people—a confraternity of fanatics—who come dancing, struggling, and staggering into Tangiers. Some endeavour to beat their heads against the walls; others are already almost exhausted, and are upheld by their companions; others, again, are pale rigid spectres, foaming at the mouth, and apparently contracted by fearful spasms. The spectacle is an unpleasant one—a grim procession of madmen, a gruesome masquerade.

The Fête of Mahomet is a more varied and much more pleasant sight, the charges of Arab horsemen, the games, the story-tellers, the snake-charmers, and the lances of the soldiers making a pleasant change. There is no drinking save a little water, no pairing off of young couples, no betting nor horse-play, which we are so accustomed to see in so-called civilised society!

But Tangiers, although interesting and containing a great deal that is novel, is not Morocco, and we must now pass outside the town, where we shall find many curious features. For instance, all around the city walls is a "girdle of gardens" rich in a sort of vegetation, but too neglected. Aloes, Indian figs, oaks, oleanders, and numerous shrubs grow thickly, and intertwine their branches with the ivy, vine, and cane. Rank and luxuriant grass, quantities of flowers, in places growing two feet high, a small white house, a wheel, a well, by means of which irrigation is carried on at times through trenches, but not a living being is to be seen. All is rank and luxuriant in vegetation, but all is dead and lonely so far as the people are concerned. Here the cultivation ends. Beyond this zone of verdure there are no trees nor hedges nor boundaries to be seen. Rolling hills, undulating plains, and verdant valleys stretch away, but scarce any tilling of the ground is attempted. Ploughing is carried on in the most primitive manner; a small so-called plough guided by *one hand*, while the other wields the whip, carries us at once back hundreds of years, when our Lord's rebuke—"No man having put his hand to the plough, and looking back, is fit for the kingdom of God"—must have been literally applicable to the implement mentioned. The mode of using this plough is curious. Any animal is pressed into the service: a goat or a mule, or both together; even a donkey and a woman are sometimes yoked, and pull together very well in Morocco. Agriculture is of an extremely primitive order, for were the land in any degree cultivated—as we understand the process—the ground would yield a hundredfold increase to the possessor.

So passing out of the strange and never-to-be-forgotten city of Tangiers, we start for Fez; for the escort has arrived, accompanied by horses, mules, camels, tents, and attendants; and last, but not least, the Sultan's permission to depart. What a curious escort we have to conduct us through the unknown solitudes, and to guard our canvas houses! What a number of animals!—no less than fifty horses and seventy mules, besides camels, which last, with their loads of wine and provisions, started three days in advance. At last all is ready; the escort is prepared, the travellers are mounted, and the cavalcade, preceded by the green banner of the Prophet, starts away from Tangiers.

Although we cannot pretend to describe an actual journey through Morocco, we may from authentic sources notice some of the chief features and incidents which the traveller will be most likely to encounter on the way; so we will beg the reader to imagine himself seated upon a horse and proceeding across the undulating country, green and solitary, wherein the so-called road is composed of a series of paths winding in and out, and sometimes descending deeply, and in its roughness resembling a dried-up water-course. A few palms and aloes may show against the golden sky, but probably no one will be met with until the

encampment is sighted, and then, amid noise and bustle, you will dismount among the attendants, many of whom have preceded you, and you will find the tents all ready. And in the pitching of tents, had you been present during that operation, as well as at the breaking up of the encampment next morning, the European will not fail to notice the wonderful passion for authority that is existent in every Arab. No one who possesses a scintilla of authority will abate it by a fraction, and many will assume an air of command although they possess it not. The servant of the lowest grade will endeavour to tyrannise over a humble spectator if he can only find a convenient opening.

On the way the native tribute of provisions will probably be paid by order of the Sultan if your caravan is of sufficiently elevated rank. Besides the heavy tax paid in money, the inhabitants must furnish this *mona* or tribute on certain occasions, and very irksome it must be. But there is no redress. Then the escort will, perhaps, amuse the traveller by their wild games and antics, racing hither and thither, discharging their guns, and yelling all the time as if possessed; then later forming into most striking combinations in their evolutions, the varied and varying colours of the mantles producing an effect which it is impossible to describe.

In crossing Morocco we must not ignore the celebrated tribe of the Beni-Hassan, which is notorious for its thievish and turbulent character. Indeed, theft is the profession of the *duar* or encampment, and it is elevated to a science. Stealing on horseback is practised to perfection: the men act and disappear with such rapidity that it is impossible to recognise them; they will also glide through grass, and come in all sorts of disguises; they will incur almost certain death to filch a fowl, and go ten miles on the chance of stealing a few shillings. The *duar*, or Arab encampment, is worth describing, as by it we shall better understand life in Morocco; and, indeed, Morocco can scarcely be realised without such a description. The *duar* is composed of a number of families, say fifteen, and all are related to each other; each family occupies a separate tent. These eligible family residences are erected about thirty paces apart, and in appearance are much the same as those used by the Numidians in the time of Jugurtha—viz., a boat keel upwards. An aperture is left for ventilation, and fenced by a tiny hedge of reeds. The tent is divided into two portions—the parents occupy one, the children the other part. In a corner we shall probably find a hen and her brood; in front of the tent is an oven, close by a plot of ground for herb-growing, and a few pits wherein corn is kept.

The furniture of the tent consists of a few straw mats, a clothes-chest, a mirror, a tripod covered with a mantle, under which the family perform their ablutions, two stones for crushing corn, fire-arms, a weaver's loom of a pattern dating from Abraham, and a few other useful articles, such as a distaff, some jars, &c. These are the usual features. A tent is usually given to the schoolmaster, but the instruction imparted is, as a rule, not very tangible. Existence is of the simplest and most peaceful kind. At dawn all the people are up, then prayers are said, the cows are fed, the butter is made, and then after breakfast the men go to work till the evening. The women meantime fetch water and gather in the wood, grind the corn, weave the material for dress, twist tent-cords, and attend to their numerous domestic duties, including the preparation of *cuscussu*.

Perhaps our readers do not know what *cuscussu* is. "It is a mixture of beans and other vegetables peppered," mixed with the juices of meat; sometimes it is sweetened. This is eaten for supper, and after supper all go to bed at sunset. A story may be told for the general entertainment, but, as a rule, the *duar* is soon plunged in sleep and in darkness, except where a lamp may be lighted in some hospitable tent to guide the weary traveller to shelter and refreshment. Although the clothing of the tribes is seldom washed, the bodies of the wearers are more carefully attended to, for no one can pray without washing, but they are always more or less dirty. The principal event in the lives of the people is a wedding. The bride is fattened for the occasion, perfumed, her nails stained with *henna*, and her eyebrows are corked. She dismounts at the door of her husband's tent and, seated, looks on at the dances and exercises of the bridegroom's friends. Coins are deposited in a cloth spread on the ground. A supper closes the ceremony. Next day the wife goes around to collect more money, and afterwards the "happy pair" go about their usual avocations in the most matter-of-fact manner. These are some of the features of life in Morocco, and for the rest who can tell? Poverty, squalor, and oppression are patent to all, and when oppression can no longer be borne revolt raises its head, and the Sultan quenches the rebellion in blood.

We will now take a glance at Fez and bring our wanderings to a conclusion. The first impression of this city is decay. On all sides houses are crumbling to pieces, and the whole place is full of misery, and steeped in a "melancholy twilight:" long covered passages like tunnels, blind alleys, dens full of all sorts of abominations. Emerging into wider streets, the crowd is very great. The principal thoroughfares are but six feet wide, and a camel tramping along, or a Moor on horseback, will squeeze the foot-passengers against the houses. Hooded spectres perambulating the streets; horrible old women, men scarcely clad, corpses carried along the street, and madmen or "saints," with an assemblage of wretched boys, bleeding prisoners, and an almost insupportable heat and dust, do not at first recommend Fez to the Christian. Yet an Arabian historian says, "O Fez, all the beauty of the earth is concentrated in thee!"—the seat of wisdom, science, peace, and religion. Do you want to make purchases in Fez you will be in some respects disappointed. Candles? "We will make some; there are none." Matches? "We will have them ready in an hour," and so on. Books are unknown. There were some once, but the owner has died, and his heirs cannot be traced.

Yet the merchants sometimes go to Italy, where they buy silks, damasks, coral, pearls, muslin, and numerous other articles. For these they exchange their stuffs, hides, arms, and pottery. The red caps which are known as fezes are made here, and are very fine and durable, while the carpets are admirable. The muskets, swords, and daggers are also of beautiful workmanship. Hides are the principal source of gain. The scarlet leather from Fez, the yellow from Morocco, and the green of Tafilet are well known. Jewellery, furniture, book-shelves are also marvellously worked and ornamented. There is no doubt that were the restrictions removed the commerce of the country would advance rapidly, and prosperity would be assured. The principal trade is with England, but much is also done with France, Spain, and the interior of Africa, whither immense caravans proceed across the Sahara. Morocco is the gate of Nigritia, and would prove a very useful portal did not barbarism thrust civilisation from the threshold.

We have in the foregoing pages given a slight and necessarily imperfect account of Morocco. Any one desirous to read a more detailed description of this most interesting country should obtain the volume written by Edmondo de Amicis,* who accompanied the Italian Ambassador to Morocco, from which much of our information has been gleaned. We have traversed this land in imagination, and have not nearly exhausted its beauties nor its interest. We could fill pages with details which all would be glad to read, but we must close. With regret we leave the land of Barbary, and—

"Folding our tent like the Arabs,
As silently steal away."

H. FRITH.

* "Morocco and its People." London: Cassell, Petter, Galpin & Co.

THE TROUBLE IT BROUGHT;

OR, THE OLD HOUSE IN THE CHURCHYARD.

By C. E. DESPARD, Author of "The Artist and the Man," "When the Tide was High," &c.

CHAPTER THE FOURTH.



AFTER our late dinner that evening my father called me to his side. "You are going to Miss Ashley's?" he asked.

"Yes," I answered;—"she said that it was your wish."

He replied, smiling, "You must not think me a coward, Mary, if I find it hard myself to tell you the story of those past days. But it is natural you should wish to hear it, perfectly natural. Young people are imaginative. I have been so reticent that you might easily come to fancy the mystery greater than it is."

I interrupted him. "Did Miss Ashley tell you I was curious? Oh! how could she? I will not go."

"Miss Ashley did not tell me you were curious, Mary: no. And indeed she only hinted—however, that has nothing to do with the matter. It has occurred to me that it would be well for you to know the circumstances of your aunt's marriage. Miss Ashley knows them. She was her confidante. She did not—but hear it all from her, my dear child; hear it from her."

His eyes fell upon the book in his hand. I saw he was not inclined to enter into the matter further, and I started with my old nurse for Miss Ashley's house.

We had to pass through the churchyard to reach it, for it was situated just beyond the old Rectory house. Indeed, Miss Ashley's upper windows overlooked the ancient terrace and the shrubbery and lawn, overgrown with weeds, which in the old days had been the play-ground of my father and his sister; and sometimes, late in the evening, when I went to her spare-room for my cloak and hood, I had looked out fearfully, in dread expectation of catching a glimpse of the ghost which haunted the desolate spot.

Miss Ashley's house itself had no such sinister associations. It was a modern house, built in the modern style, and fitted up with all the modern conveniences. In the productive, well-kept garden, the smooth-shaven lawn, the well-gravelled paths, the trim hedges and clustering evergreens; in the diamond-bright windows and snowy curtains; in the roomy and appropriately furnished interior, the crimson-carpeted hall, the bright little flower-fragrant drawing-room, the capacious dining-room, and the snuggery within, where Miss Ashley kept her books and work, and the pleasant ladylike litter with which the idle delight to surround themselves, comfort could be read—comfort in large letters, comfort perpetually obtruding itself upon the notice of those unhappily constituted people—and according to Miss Ashley their name was legion—who did not so much as understand the word.

If comfort be at one end of the scale, the shivering ghost, with its breath of mortality, its reminder of the cold clay sods, may be said to occupy the other.

The haunted house and the modern house were two different orders of existence. It really surprised me sometimes that the ghost legend could continue to flourish in such a neighbourhood. The contrast was

one of the emotions of my childhood. From Miss Ashley's hall to the skirting walls of the old Rectory and the churchyard was only a step; but what a step! I think it was the revulsion of ideas caused by the frequent transit from new to old which first awakened in me that lofty scorn for comfort as comfort which, upon my untimely expression of it, one day called down James's scathing ridicule, and induced Henry to warn me gravely against the follies of sentimentalism.

These ideas and remembrances were in my mind that night, as I went to keep my appointment with our neighbour.

I found her in her snuggery behind the dining-room. A fire was burning brightly on the hearth; the little tea-table was spread; Miss Ashley, looking the very impersonation of comfort, sat in the sofa-corner, her feet on the fender, and a small lounging chair was drawn in front of the fire.

"Welcome," she said, when I was shown in. "Here are your chair and your cup of tea—everything ready."

What my father had hinted about Miss Ashley had made me indignant. I had meant—young girls often make similar resolutions—to be stiff in my manner. But where is the young girl whose resolution does not melt under the influence of genial kindliness? "I really do believe she means well," I said to myself, as I smiled dumbly, and took the offered chair; "and then she is hospitable—there can be no doubt about that."

Wherewith my lips expanded, and I looked, I have no doubt, as amiable as if I had never had any cause for complaint against Miss Ashley.

"Now, this is comfortable," she said, in answer probably to that genial smile. "You will pour out for me? Thank you, dear. To see you sitting there—— By-the-by, has any one ever told you how like you are to your Aunt Laura?"

I like the lovely picture in my father's study! I shook my head. Miss Ashley meant surely to flatter me.

"No?" she said. "That is strange. To me the likeness has always been remarkable. It is one reason for my deep interest in you, Mary. I went to see you when you were an infant; your father stood by my side. I looked up at him; the same thought was in both our minds. 'Laura has come back to us,' I said. He pressed my hand silently. Well, well! how many days have gone by since then! We had hope of seeing our darling again; we thought she would come back to us; but it was not to be."

The cheerful sentimentalism with which this lament was spoken prevented me, I fear, from feeling entirely sympathetic; and Miss Ashley did not linger long over it. She paused, and then "Will you hand me a screen, dear?" she said, still with a sighing intonation in her voice. "Take the other yourself; complexions ought not to be trifled with, especially at your age. People call the desire to preserve one's good looks as long as possible vanity. Never a greater mistake. It is wisdom; it is a due and proper regard for the comfort of other people Why should I impose myself upon the world as a fright at an earlier date than is necessary? We must all grow old some day."

I ventured to remark that old people were not always ugly. Miss Ashley made no answer. She drank her tea; her hands dropped in her lap; forgetting the ageing effects of fire-light, she looked out before her at the glowing coals. I liked her better so, and I drew my chair closer to the sofa—a movement which aroused her from her reverie.

"I was thinking, Mary," she said; and drawing herself back from the fire, she resumed the use of the guardian screen. "I promised to tell you a story this evening. It is a little painful—a very little."

I tried to make her understand that I did not wish her to tell me anything it would give her pain to tell; but she put aside my objections with a wave of the hand.

"I suppose you know," she began, "that your Aunt Laura was your father's step-sister only, and many years younger than himself. She took after her mother's family. Her mother was an extremely beautiful woman, and very clever and accomplished—so I have heard, at least, for of course I do not remember her. Your father loved her as much as if she had been his own mother, and at her death—he was about twelve years old then, and the little Laura a mere child—he was perfectly inconsolable. But presently the two children became all in all one to the other. I was their principal companion, and I remember well how pretty a thing it was to see them together. She always acted the little queen, and he submitted to all her whims and caprices with the best grace in the world. But truly few people could resist Laura; she was the most fascinating little creature that ever was seen. My father and mother belonged to the old school; they thought discipline should begin in the nursery—that young people should be seen and not heard, and that to be forward was one of the worst crimes. But our little witch, as some of us called Laura, had the power to fascinate even my parents. When she was not present they talked sadly about her future, and feared the worst of ill for a child so persistently spoiled. The little fairy appeared upon the scene, and they joined the rest of the world in spoiling her.

"Your father, as you know, was ordained, and became curate here; your grandfather died, and he succeeded to the living. Laura took the head of his table, for at that time he did not think of marriage. They were devoted to one another, and the Rectory was one of the most charming houses in the county. Laura was not only fascinating, graceful, and ready—not only did she possess the gift of attracting the best people, and so managing them that they showed themselves at their best in her presence—but she was also exceedingly talented. She could recite charmingly; she could draw and paint; she could write verses, chiefly of a light and witty description—at that time we did not think she had any sentiment in her composition; but above all she was a musician. And yet—I don't know—I may be drawing on my imagination—if I remember rightly, she was not a brilliant performer. She could play and sing, of course, and there were those who went

wild about her voice. *I* do not think it was so very remarkable.

"But in her power of feeling music she was a musician indeed, and I really think this was one source of her fascinating power. Her utter absorption in music that pleased her, the leaping of colour into her face, the tears that came to her eyes so readily when a touching ballad was sung or a sweet melody played, were the most delicate flattery to those who had been performing. It went abroad that Laura Winstanley was as gifted in music as in everything else, and musicians—even one or two famous composers—frequented the Rectory, that she might hear them, and give her opinion about the worth of their music.

"Of course suitors came—that was to be expected; but Laura and I were of the same opinion in those days. We loved our homes, and did not wish to sacrifice our freedom.

"Such was the state of affairs when your father, whose gift for preaching was pretty widely known, received an earnest request from one of his college-friends, settled as rector in a crowded commercial town in the north of England, that he would take his pulpit for two Sundays. Your father did not like to leave home, but there were circumstances in the case which made it difficult for him to refuse. He went, and returned after a fortnight's absence, bringing with him a young man—a foreigner—whom he had picked up in an almost starving condition in the streets of the town to which he had gone—a seaport. I was at the Rectory when, shortly after his return, he told your Aunt Laura of his acquisition.

"The young man, it appeared, was a musician, of great talent. He considered himself a genius. He had composed something—an opera or oratorio, I don't quite remember what. In his native country, Greece, there was no market for such things. With sufficient money for the journey and the manuscript of his work in his pocket, he had started for England, where, he had been told, genius could always force its way to the front. He had no introductions; he had not a single friend in the country, and he was perfectly inexperienced in the ways of the world. If your father had not seen him—it was outside a church, on a Sunday, and he was listening to the music of the organ—he must have died of starvation.

"As it happened, our organist was leaving. When your father had fed and tended the unfortunate stranger, heard his story, and tested his powers, he offered him the post.

"I need not tell you the romantic story interested us. You will easily imagine that it did; but Laura was specially excited. She wanted to see the suffering genius at once; she was vexed that your father, who had taken rooms for him in the village, had not brought him to stay at the Rectory, when she found she could not see him until the following day. She asked a thousand questions, and even after your father went to his study, and left us alone, she continued to talk of the new organist. I laughed, I remember, and told her to take care of her heart: a genius in distress, I said, is apt to be too fascinating; but at this Laura's face became clouded, and she talked of other things. Jokes of such a kind did not please her. 'If there be such a thing as love,' she used to say, 'it is too sacred to jest about.'

"The next day was Sunday. It was arranged that the new organist should take the morning service. We were deeply curious and interested. The story had spread about—how, it is impossible to say—and the church was full. I could not help glancing at the Rectory-pew that morning. Laura sat there alone. She looked lovely; there was a light of enthusiasm in her face; she sat motionless, her eyes widely open, her whole attitude expressive of wrought-up expectation; and even then I thought it was a mistake. If, I said to myself, her deeper nature should be stirred—if admiration should join hands with pity—— Strange as it may appear to you, Mary, I almost reached the point of *wishing* the music of that morning service to be a failure.

"But hopes and fears were soon laid to rest. Scarcely was the voluntary begun before all those in the church who knew anything about music were aware that a master-hand struck the chords. I am not a musician, as you know, but I was so far moved as even to forget the Rectory-pew and its solitary occupant. It is no exaggeration to say that our old organ was made to speak. But a difficulty of a curious character arose. This man, you know, was an enthusiast. The organ at that time was in the little gallery. The former organist was always on the watch for the signal to leave off playing. This young man had been instructed when to stop; but once seated, he forgot everything. The rector was in his place, the books were opened, the congregation waited; but the music did not cease. Two or three different messengers were sent up; apparently he did not understand them. Resigning himself to the inevitable at last, the rector took a seat, and for all five minutes the impassioned music filled every nook and cranny of our little church.

"Some of the villagers speak of the scene still. They say it was like a sad story, and some listened breathlessly, and others covered their faces with their hands and wept. In the midst of it all, I looked towards the Rectory-pew; Laura had dropped upon her knees—I could not see her face. At that moment, Mary, I saw, as in a vision, what would be.

"But the music ended at last, and the service proceeded. The rector gave no sermon that day; his organist, he said, had spoken to his people more eloquently than he could speak. He would do nothing to destroy the impression his music may have made. At home he spoke with delight of the treasure he had picked up, and formed grand plans for the betterment of his people, through what he called 'this new means of grace.' But Laura was pale and languid, and did not respond with her usual energy. In the course of that week I met the young organist at the Rectory. He was shy and retiring; he spoke English with a broken accent, and he bore on his face traces of the hardships he had undergone. But for all this, perhaps

on account of it, there was a particular charm about him. His face was a little rugged as to features; he had heavy eyebrows, and dark, expressive eyes. This is what I remember. I am no hand at description, but certainly I thought him fascinating; and I was not surprised, only deeply grieved, when the conviction that Laura thought of him too kindly could no more be forced from my mind.

"At that time your father had no suspicion of what was going on. Laura came to me for advice. She knew he loved her; he was fighting against his inclination; he was suffering; he was dying; the thought of her prevented him from carrying out his life-work. What should she do?

"I recommended her to leave home for a time. She took my advice. I should have told your father then; the man might have left our neighbourhood during her absence (how many times since I have blamed myself for my weakness!); but Laura had drawn from me a solemn promise to keep her secret. I dared not break it. Besides, I still had hope in her strength of will and wisdom.

"But circumstances were stronger than either of us. Our musical genius was one of those sensitive, spoiled children of nature who, when their will is denied, find it impossible to sustain their life and do their work.

"In Laura's absence he fell desperately ill. Some stupid gossip wrote to her about his illness. She, poor child! returned on the wings of the wind. She was almost as ill as he was; she said nothing to your poor father; she did not even go to the Rectory first; she rushed to his lodgings, and took upon herself the task of nursing him. I must say, in justice to my poor Laura, that our village nurse at that time was anything but a favourable specimen of the class. Neglect was helping the love-sick musician to his grave. But neglect was at an end. Laura nursed him back into life, and he showed his gratitude by declaring his love.

"Perhaps I am too harsh, Mary; it may be that he could not help himself; but when men are born weak I say they should borrow strength—they should die—they should do anything rather than act with dishonourable treachery, spread misery around them, and ruin the lives of others.

"I speak strongly, for the memory of those days is bitter in me; besides, I am anxious, above all things, that the mistakes of the past should not be repeated.

"Your father was thunderstruck, as well he might be, when he heard his sister's story. A penniless man, a beggar, without home or prospects, aspire to the hand of the beautiful and accomplished Laura Winstanley! The thing was unheard-of, absurd, insane. For the first time in his life, he was angry with his sister. As she valued his friendship, he commanded her to put the idea out of her head.

"But here, too, he was injudicious. Matters had gone too far for high words to avail anything. If he had dissembled, if he had been prudent, if he had advised them to wait for a few years, all might yet have been well.

"By his high-handed displeasure he aroused Laura's spirit. Mary, it is all very sad to remember, very sad to tell. She left us secretly. A few days later, we received news of her marriage. Then, though your father would have followed her, would have forgiven her, would have allowed her a sufficient income to prevent her from feeling the sting of poverty, he could not. She gave him no address; he found it impossible to trace her. If he erred, she punished him bitterly."

Miss Ashley's voice fell. "But my father heard of her again?" I asked.

"Yes, after years had gone by. I do not know precisely what passed between them. I believe she was poor; if so, I am sure he assisted her. There was talk of her coming to see us, or of his paying her a visit in her adopted country. I asked your father, but he never told me much, except that the love she felt for the man she had chosen was always as strong as on the first day. There was some surprise, I believe, some disappointment (and in this your father shared) that he had not made his way, that his talents had not been generally recognised. In the one and only letter I received from my poor Laura after her marriage, she said that her husband would never bring her back to the old place until he had gained from the world that recognition which would place him on a footing with the rich and well-born; and in this determination, Laura said, she agreed heartily. She was always high of spirit. I think the resolution must have originated with her. In fact, Mary, we were wrong: we mistook her strength of character. She had always been so gentle and amiable, she was of so affectionate and tender a nature, that we believed the thought of separation from her own, of estrangement from her friends, of her idolised brother's displeasure, would be enough to turn her away from the course of which we disapproved, chiefly because we knew its result would be misery for her. We were mistaken: the new feeling was strong enough to sweep everything before it. And we lost her—we lost her—the world lost her."

Again Miss Ashley paused. "But are you so sure it was misery?" I ventured to ask.

"To be taken away for ever from her country and friends, to live in obscurity, to die an exile!"

"If love is what it is said to be——" I began; and then my voice was drowned in blushing confusion.

The mere hint was sufficient for Miss Ashley.

"Take warning," she said solemnly. "You see where romantic ideas may land a girl."

"In a true love and a life-long devotion," I answered stoutly.

"In an obscure life and a lonely death."

"Lonely! Was not her husband near her, and her child?"

"Mary, you are stubborn. I will not argue with you. Only let me entreat you to be prudent. Your cousin will arrive shortly. She may be handsome."

"I hope she is."

"My dear, do not interrupt me, especially with such foolish wishes. I hope your Cousin Nina is ordinary-looking. You have three brothers, remember."

I laughed. "Henry and James are too busy to fall in love; besides, they will only fall in love prudently. Eugene——"

"Yes, Eugene?"

"Eugene is always to be trusted. He will do what is right and noble under every circumstance!"

"Stuff, my dear child: stuff and nonsense! I don't wish to depreciate Eugene. He may be, as your father and you seem to think, the most remarkable member of the family."

"He is, Miss Ashley, he is."

"If you will have it so, well and good. One thing you will not deny—he is young."

"Oh yes, he is young; but——"

"And he is idle."

"Not idle, Miss Ashley, I assure you. He reads and writes and studies. He will be a great literary man one of these days. You cannot imagine how much preparation it takes."

"Well, well; grant that he is busy; you won't deny that he is always at home. If he should fall in love with your cousin!"

I did not answer; but now Miss Ashley had put the thought into my head, it occurred to me that love might possibly be the spirit I had so often invoked: the spirit that would awaken Eugene, not from the dream of idleness, but from the still more numbing dream of self-depreciation. If one person believed in him fully, he might gain confidence. It was only confidence he wanted—a firm reliance on his own powers. Absorbed in these thoughts, I scarcely gave due note to Miss Ashley's further words, but I believe they were full of warning.

I returned home to dream about the beautiful aunt, whom I seemed to know now, and the cousin, her daughter, and the witness of her devoted life, who was to come to us. Miss Ashley was left alone to comfort herself with the reflection that, whatever might happen, if the worst should come to the worst, if my three brothers were to fall in love with my one cousin, if our house was to be rent in sunder by unbrotherly strife, she at least had done what she could—she had warned me.

CHAPTER THE FIFTH.

A FEW days after I had heard this story, I had the pleasure of welcoming Nina to the Rectory. She was all I had expected her to be—more; and, so far, Miss Ashley's forebodings were verified. Two of us fell in love with her straightway; but it was not likely, happily for the preservation of our family harmony, that these two loves would clash, since between brother and sister, in these matters, no jealousy is likely to arise.

I had made up my mind to love her. Whether Eugene had the same determination or not I cannot tell. It is certain that from the moment he first saw her, in her dark travelling dress, looking pale and sad and a little bewildered, his heart, like Mark Antony's on the Cydnus, was "pursed up." It belonged to himself no longer.

Nina came to us in the autumn. My father went to one of our northern seaports to fetch her. They spent two or three days there together, and when they arrived at the Rectory, I could see that already they understood one another thoroughly.

We had dull weather that autumn, and Nina was often pale and sad. The change of climate and the change of life tried her, and she could not at first feel towards us as anything but strangers, except my father, and I, who had never been able to express my feelings, sometimes envied her a little for the delicate grace and tender, childlike reverence which distinguished her manner towards him.

It was pleasant also to see how her presence moved him. In the village it was said that the rector was another man since his niece came. Certainly he was more cheerful and sociable than he had been. He did not so frequently, as of old, spend the evening alone in his study. When he joined us he would put down his book, and enter into our light gossip, our occupations and amusements. Nina was clever in different kinds of needlework; and she and I often spent the evening in designing patterns for her embroideries, for if she excelled with the needle, I was a better draughtswoman than she; and in these designs and their elaboration my father took the greatest interest, asking nightly about their progress. Sometimes he read aloud to us as we worked, and I noticed that, at such times, he would pause now and then, and let his eyes rest upon Nina's lovely face, as if he would make certain that he was pleasing and interesting her. She caught his look sometimes, and her colour rose, her eyes brightened.

Once she got up suddenly, and kneeling down before him, kissed his hand, and, in a low tremulous voice, thanked him for his goodness to her.

I remember the occasion well, because of my indignation with James, whom I caught looking at Nina with a half-smile.

I had it out with him—I use an expression known to sisters and brothers—on the following day. Perhaps I need not remark that I am naturally of an impulsive disposition.

"James," I said, "you are hateful! I believe you think there is no truth in any one. Your own cousin!"

His raised brows called loudly for explanation.

"You know what I mean. Why did you smile yesterday evening?"

"Why did I smile?"

"James, you are exasperating."

"But smile? When did I smile?"

"I suppose you thought it put on."

"Oh, last night you mean?" James proved he understood the mimetic art by throwing into his features an expression of sudden enlightenment. "But the attitude was so pretty, Mary, it was so well done."

"There was no attitude about it."

"My dear girl, what do you mean? An attitude is——"

"I don't want to hear your definition of an attitude."

"Then what in the name of all that's sensible *do* you want?"

"I want you, if you have disagreeable ideas, to keep them to yourself."

"But when you give my looks an interpretation of your own! Smiles are not always contemptuous."

"Yours was. I know it was."

"Since you are so sure about it, there is no more to be said."

My disputes with James generally ended in a similar manner; but, though my cousin Nina had ways that, bringing to mind her foreign training, were not sufficiently English to please my brother James and some of our neighbours, I, being sure that those ways were her own, continued to believe and maintain that they were thoroughly natural, and, what is more, that, coming from her, they had a certain indescribable grace.

Eugene supported me, and it pleased us both to see the good effect Nina's presence had upon our father.

We could understand whence it arose, for the story Miss Ashley told me I had retailed to Eugene—*minus*, of course, the warning tacked on to it; and we knew that in Nina, the child who had been taught from her babyhood to love him, and who came to him with her heart full of gratitude and affection, only waiting, with earnest desire, to show itself, the burden of our father's life was taken from him; he felt the mistake of the past atoned for, he was reconciled with his beloved dead.

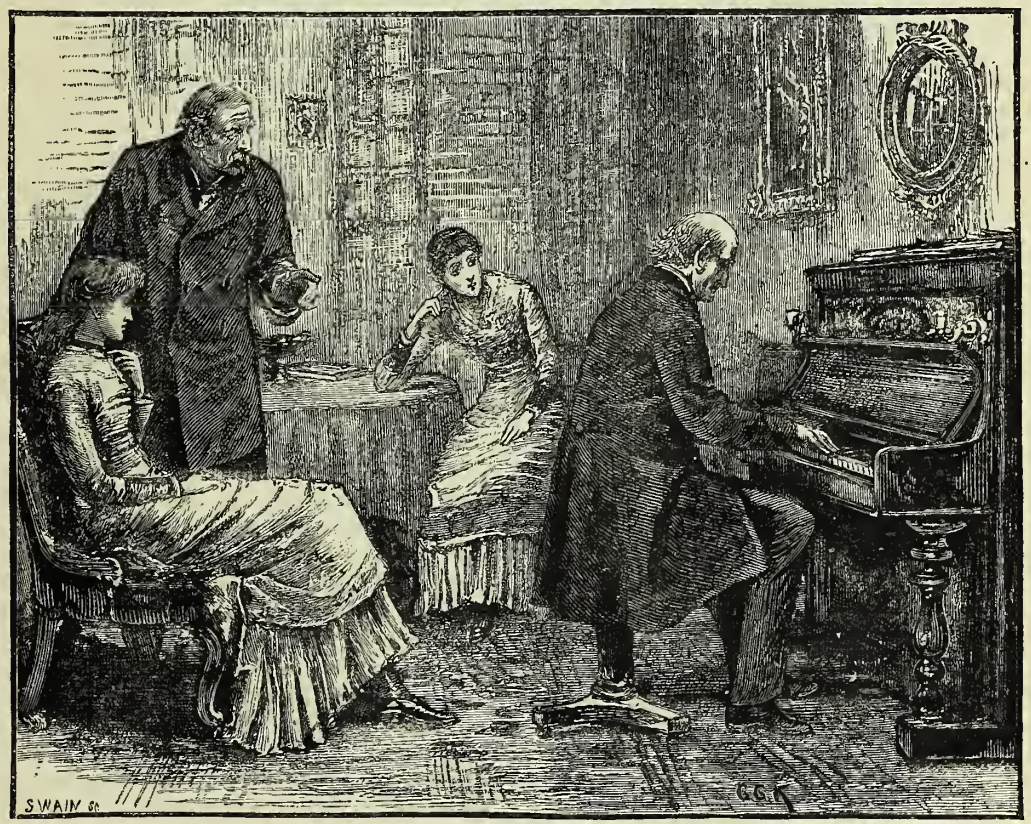
This became still clearer to me one evening about a month after Nina's arrival, when my father, to our great surprise, seated himself at the piano.

"You did not know I could play, Mary," he said, looking round at me with a smile. I glanced towards Nina. In reverence for her grief we had not opened the piano since her arrival.

She was looking at my father with parted lips, and an expression of almost painful expectancy in her eyes. He struck a few chords, then fell into a melody, soft and plaintive, that I had never heard before.

My old music-master, Mr. Dubois, was in the room.

"Monsieur your father has an admirable touch,"



"YOUR FATHER HAS AN ADMIRABLE TOUCH."

he said to me in a low voice; "but whose is the music?" I shook my head. "And that again," he proceeded—a little to my annoyance, I must say. My attention was sufficiently occupied with listening to my father and watching Nina, and I did not wish it to be distracted. "It is new: Mademoiselle Marie, help me." He looked perplexed. "I am sure I must be acquainted with such music as that. Monsieur, *de grâce*"—my father had stopped playing—"give me the name of your composer. I am ignorant, without doubt. He is famous, well known?"

"He was never famous or well known," said my father quietly, "but he was great. I will give you his name some other time, Mr. Dubois."

"But to write such music and not to be known!"

"Yes, it is one of the mysteries. Will you take

my place—or," looking from me to my master, "I suppose you have enough of Mary's playing?"

"Mademoiselle Marie makes progress," the old man replied. "She has the merit of industry. I will play for you—oh, yes! My flute is in the hall. I have been working hard on it in the dull days. If Mademoiselle Marie——"

I took my place at the piano, and my old friend went for his flute. In the short pause that ensued before we could decide upon a suitable piece I looked round. My father had joined Nina, who was on a low chair near the fire. Her delicate face glowed with colour. Her eyes were bright. I heard her say to him, "Thank you; it has brought back the past."

"I have not pained you?" he asked, a little anxiously.

"It was the happiest of the past," she answered, and I heard no more. My old master was sternly drawing my attention to the matter in hand. He did not understand, and could not tolerate, this divided interest.

I said to Eugene on the following day when we met, as we often did, for an evening ramble, "I am glad the ice is broken about her past. But how delicately our father did it!"

"Yes; if Nina had not come we should never have understood him so well."

"Did they talk while we were playing?" I asked.

"Yes, for a few minutes. I heard Nina say that she was not with her father at the last. He went to Paris: it was in pursuance of a final effort to get his work published; she remained behind. They lived in a small Italian village. She was sent word of his death, with a letter containing his last wishes. Some of his friends had in the meantime written at his request to our father."

"Poor Nina! no wonder she is pale and sad."

"His latter years, she says, were full of care. As he grew older the consciousness of wasting powers and the bitterness of his disappointed life became an impenetrable cloud about him. Even the gladness of his fatherhood was darkened, and the simple pleasures of their daily life had no more charm for him. I should tell you that our father had so arranged matters as at least to prevent their suffering from want; and this income from England, which he called charity, was like a slow poison to him. So long as his wife lived he fought against his despondency for her sake; when she died, the darkness fell."

"Did you hear all this yesterday evening?" I asked, in some surprise.

Eugene's face became suffused with colour; I looked away. I did not wish to embarrass him, for my brother's confidence in me made me feel happy and proud.

"I have been talking to Nina to-day," he said presently. "I did not ask her anything; but what passed yesterday seems to have unlocked her heart. She had a longing to talk about the past. I happened to be at hand. I was reading in the arbour: she passed by."

I could not refrain from saying, with a smile, "You were also the most sympathetic person within her reach."

"Well, it is no matter," he answered; "I have told you, Mary, that you might be tender with her."

"I am tender with her always, Eugene. Do you not know how much I love Nina?"

"Yes," he said, in a half-apologetic way that made me at once forgive him for his over-solicitude; "and no doubt you understand more about these things than I do; still, I would not lose the opportunity. I think she should be drawn on to talk about the past until its memories lose their bitterness. You can do this better than I; girls like to confide in one another. You would be rewarded. Anything more heart-thrilling than this tale of a disappointed life I have not heard for many a long day."

I looked at my brother; his face was kindled as with a great enthusiasm.

"It has inspired you," I said. "Confess, Eugene, you have been writing a poem this afternoon."

"Mary, you are a true woman; you imagine a poem can be thrown off in an hour."

"Is not that the meaning of inspiration?"

"Inspirations are not all of the same kind nor of the same degree."

"Eugene, it is not like you to be pedantic. Do show me what you have written."

"Why do you assume that I have written anything?"

"Why do you allow your face to tell tales? But, joking apart, I have found out. Now, tell me."

"If you have found out——"

"Eugene, for pity's sake, don't begin to be logical. Poets should take large views of things; they should leave hair-splitting to others. Tell me."

He did not answer directly. It was a bright evening, I remember, very early in spring, and he began to call my attention to the beauty of the young leaves only just escaped from their winter-sheath; the small, vividly-green leaf-clusters of lime and elm, through and between which the red sunset fires made their way, and to the softness of the tremulous coloured mists that veiled the neighbouring common and woods.

"It is a beautiful world," he said; "a pity it should ever be cruel!"

"Is it the world that is cruel," I asked, "or the men and women in it?"

He answered, baring his head reverentially, "Nature is always beneficent; beneficent even when she is terrible—perhaps most beneficent then. I spoke lightly; forget my words."

"And do you not think," I said hesitatingly, "that there may be something to be said about the other cruelty—the cruelty of men and women? Is the world intentionally cruel? May there not be other reasons for failure?"

I dared not look at Eugene now.

"What do you mean?" he said.

"Nina's father failed," I said with haste.

There was an ulterior intention in my words, but I did not wish Eugene to recognise it too crudely.

"Yes," said my brother, "he was too sensitive; he did not take the right way to build up a reputation."

"He did not believe in himself."

"On the contrary, he believed in himself too much. He was proud; he would not move a hair's breadth from his own position. Once or twice he might have been taken up; his proposed patrons presumed to patronise him; he took offence, and refused their aid."

I asked again in astonishment how Eugene had picked up all this information about one who but yesterday was a name to us, and nothing more.

He told me our cousin had put her father's papers in his hands; amongst these was a diary, which he had kept sedulously during the early part of his life.

An idea struck me. "I imagine you and our uncle entirely opposite dispositions, Eugene," I said; "if you had ever come together!"

"One might have supplied what the other lacked. Is that what you mean?" said my brother, smiling.

"Something like it," I answered.

"But he has gone," said Eugene; "gone away from us all, in the darkness of his spirit."

"Yes, he has gone, but his work remains; he might be vindicated."

I did not venture to say more. We were also near the house, and I had to hurry on to dress for dinner.

But when dinner was over—it was an unusually quiet meal that evening—Eugene invited me to his little study.

The nights were still cold, and I knew, to my deep annoyance, that Eugene as a general rule worked without a fire. I had often reasoned with him about it, but he would not listen to reason. "When I am shut up by myself," he said, "I do not feel the cold."

I inquired how it was, then, that he came out so often with blue lips and numbed fingers.

He said I was imaginative. I threatened to appeal to our father? This really vexed Eugene, and he would not be satisfied until he had made me promise to do nothing of the kind.

"Can you not see, Mary," he said—how I wish some of our friends could have heard him!—"I am a burden on my father. At my age this would be unpardonable if I did not hope to take a higher position for my present uselessness. But since our father is so generous as to admit this and to allow me time, ought I not to be very careful how I use his kindness? For me to slip into luxurious habits would be worse than folly."

And after this I could say no more. But as I felt the cold intensely, I ran off that evening to fetch my shawl. It was an unnecessary precaution. I found my brother's small study lighted, and a bright little fire blazing on his hearth.

Of course, I protested. I did not see, I said, why he should consider me more tender than himself.

"A fire helps out confidences," he said. "Don't grumble, Mary, but sit down."

I said eagerly, "You are going to read your poem to me?"

"I will give you its outline if you like," he answered.

"If I like!"

He smiled, and expressed a wish that every one was as enthusiastic as I. Then he took some blue sheets of paper from the table, drew the lamp towards him, and began to read aloud, in that low, deep voice, with its varied cadences, which was Eugene's principal charm.

But soon I forgot his voice; I forgot him. I was absorbed in the thoughts which his story awakened.

For it was not a poem yet; it had not, that is to say, been thrown into form. It was an outline only, that waited for the hand of the artist to mould and complete it.

But even as it was I thought it beautiful, for I saw and grasped its meaning. The subject was failure. Success has often been sung; it is an idol the human race has worshipped from the beginning. Failure is a miserable fate from which men flee with hatred and disgust.

My brother in his proposed poem had taken upon himself to dignify failure, and soften its harsh features. This, I think, was his root-idea. He illustrated it by tracing the imaginary story of a winged genius whose aim was to achieve immortality, but who was limited as to time and material. It must work through a man—it must work upon humanity; and the life-time of a man, from childhood to old age, was the period given in which it was to work. It began grandly. The human child chosen responded to its touch. He saw visions, and dreamed dreams. Entering not into the ordinary life of childhood, he strayed into the desert, and gave himself up with a touching obedience to the magnificent inspirations of his winged guest. He grew up to man's estate, and he was like one inspired. Lofty images possessed his soul; his lips moved in melodious numbers; the fervour of prophetic fire gave force and energy to the eloquent words with which he thought he could move the world!

But the world would not listen. And why? He spoke a language strange to it. He saw this; he felt his loneliness; and a desire for human sympathy prompted him to learn the language of his fellows, and translate into it the great thoughts which filled his heart. But the genius, his companion from childhood, was wroth with him. Was not this a base truckling to what was low in humanity? Men should learn his high and beautiful language; for him to learn theirs was to stain himself with folly. The inspired man speaks again, more loudly, with a grander assurance of dominion. The world takes no heed of his voice; and the winged genius that inspires him, seeing its hopes dwindle, sinks into despondency.

It knows, and he knows, that what they have to tell is grand, is worthy of reverence; they believe that some day the wheels of human progress will pause, and the heart of humanity beat slowly lest one of those accents should be lost. But that time is not yet; and the man is waxing old, and the spirit that inspires him beats its wings feebly, and prepares to look upon death. They make another effort. He will learn the language of men; he will speak to their senses first; afterwards they will listen to the spiritual speech.

It is useless. The resolve has been taken too late. He has lived his life in the clouds and ether; between him and his race there are no points of contact by which one can arrive at the meaning of the other. He must be heard as he can speak, or not heard at all. And the old efforts are renewed, with the old results, till, at last, the man's frame becomes weak, and the spirit that has ever sustained him loses its power over his will; and the great thoughts are succeeded by small

story that I interrupted him. I could endure silence no longer. The idea, which throughout had been working through my mind, forced its way to utterance.

"You are the interpreter," I said, quite childishly, clasping my hands.

Eugene put down his manuscript.

"It is all real to you," he said, smiling. "I am glad you feel it so."

"Put it into poetry," I cried eagerly; "set it to the



"I WAS ABSORBED IN THE THOUGHTS WHICH HIS STORY AWAKENED" (*p.* 103).

imaginations, and he lives through the body alone, and forgets the noble thirst of his youth.

Thus till death is longed for as a releaser, and death comes to the worn-out prophet and to the winged genius, his companion—death in place of the immortality for which they had striven; and men write over their tomb the ignoble word, "Failure." For a few years only. The day comes when the word is erased. Through the portals of death the man and the spirit have entered upon life.

One arises who interprets their speech, one who has learned both languages.

It must have been at about this point of my brother's

music of Nina's father; bring them out together. You will make the dead speak."

I started from my seat as I spoke. Eugene was silent.

"The thought has come to you?" I asked.

"Not quite so definitely," he answered. "Thank you, Mary. I am glad it came to you as well."

He got up then, and opened the door for me. "I am keeping you up," he said.

I looked at him wistfully. He stooped, and kissed me on the brow very tenderly.

"Good night, Mary. I shall think better alone."

END OF CHAPTER THE FIFTH.

FOOD AND MEDICINE FOR CHILDREN.

BY A FAMILY DOCTOR.



STATISTICAL writers tell us, and we are bound to believe them, that considerably more than a quarter of the children born in this country die before they reach the age of five years. Philosophers, on the other hand, hint that the living world has no reason to regret such mortality; for, say they, if the population of the world goes on increasing at the present rate, in somewhat under a thousand years there will hardly be room for the people to live on the face of the earth. We ourselves are not so sure about this, and we seldom trouble to think about it; but of one thing we do *feel* certain, and "feel" is just the right word to express my meaning—namely, that there is something about the very helplessness and innocence of a child that draws us, as with a spell, and compels us gladly to do all we can to protect it from danger, and assist it in living. Philosophers may drive one way, but instinct and nature pull the other, and so in my present paper I prefer leaving philosophers alone, and statistics too, and to obstinately stick to common sense. Well, then, I begin by saying that it is before a child is positively ailing that a mother ought to ask herself a question, which not only concerns her own happiness, but the future fate and welfare of her offspring as well: "Am I feeding my child in a way that is naturally conducive to its health, strength, and increase of body? Am I doing right by wee Johnny, kicking and crowing in his cradle yonder? He *is* so joyous now, it does seem as though he never, never would ail. And little inquisitive Edith here, prattling on my knee, she seems the quintessence of health itself; is it possible that a time may come when her skin will burn and her brow will ache, when heavy lids will droop over languid eyes, and her voice be quiet and spiritless?"

The answer is "Yes." And appearances are deceptive: it is not your plumpest nor even your rosiest children that are the most healthy at heart, and the most unlikely to be struck down by sudden illness. A moderate degree of plumpness and rotundity we like to see in all children, but whenever that rotundity approaches what the Scotch expressively term the "flozy," and when the child is dull and somewhat apathetic, shy, and *too* good-natured, depend upon it there is some error in the diet somewhere, and inflammation, croup, child-crowing, and a whole host of infantile ailments may be hovering near. On the other hand, an over-pale, thin, and peevish child cannot be a healthy one. Instead of "peevish," I had almost used the word "puling," which is an ill-natured word, and one that ought never to be applied to a child. A child ought naturally to be as good-natured and happy as the lamb that gambols in the field. But then a lamb *lives on its mother's milk*, and this remark permits me to glide gracefully into the subject of infantile feeding. In all cases where it is possible or practicable, the child should be fed by the mother herself; it is the baby's natural food, and not to allow it to have it, is to endanger the life of the child, and the health of the mother as well. It is not my object here to do so, but, if I chose, I think I could tell you of more than one case of painful disease ending fatally, which in my opinion I could trace to the error of giving baby to others to nurse, and driving the natural food away. For Nature, kindly as she may be, is not slow in resenting any infringement of her laws. But strongly as I feel on this subject, I will say no more about it, for a hint will often do more good than vituperative eloquence. When from any cause an infant cannot be reared upon its proper food, then we have to look about for a substitute. I shall not do more than mention what is termed a "wet-nurse." Parents must consult their own physician on this subject, but a word or two about the feeding-bottle and its contents will not, I think, be inopportune.

Away in the open country, where the milk-seller has hardly yet learned any of the vile secrets of his craft as practised by some in towns and cities, cow's milk may be had pure and good, and is greatly relished by young infants. It is more the province of the nurse than the doctor to say how it is to be given, and she will know that the milk should be *warmed*, and raw sugar added to it, and diluted with water, gradually adding less and less of this as the infant grows older. She will know, too, that it should not be boiled or scalded, which would result in a separation of the fatty portion of the milk. Neither need I tell her that when the milk disagrees, and brings on diarrhœa, it is usually caused by its being too strong, and about a table-spoonful of lime-water (the *aqua calcis* of the chemist) added to baby's bottle will tend to correct the secretions. Again, I feel it would be almost insulting a respectable nurse to remind her that the india-rubber teat of the bottle should have very fine perforations, so that the milk may not come too quickly into the mouth of her little charge, and that no more milk should be prepared at one time than is absolutely necessary; that the bottle itself and the glass tube should be soaked in water after use, so as to be the perfection of cleanliness and sweetness, or that the bottle should be taken from the infant even before it is quite empty, so as to prevent the child from sucking and swallowing air. A good nurse

knows all this, at the same time I think a mother, be she ever so delicate, cannot hurt by having her baby in its bassinette in the same room with her. She will then see and be sure he is being properly attended to. While strongly urging, then, mothers to suckle their own children, I see no reason why with great care and attention they may not be reared by hand. We have, in addition to cow's milk, goat's milk, which is even better, and need not be diluted; the same may be said of ass's milk, which does in some cases exceedingly well. Then there are the condensed milks of the shops, which may be tried when other milks seem to disagree. There is one thing to be said in their favour, they are far better than the adulterated milks of large cities.

If a child cries much, it is a sign that things are not going well with him. In such cases he will be very sleepless, and the administration of a little diluted spirits may suggest itself. If such a thought does come into a mother's head, let her get rid of it as soon as possible. Give him neither spirits nor opiates, nor soothing syrups, but seek for the cause, and if that cannot be found by either mother or nurse, the doctor had better be consulted. Referring to what I said above, that a baby was naturally as good-natured and joyous as a lamb, I here add, if your infant has had good sweet milk of a proper temperature, if his bed is soft and warm, if the air is pure around him—there is a great deal in that—and if his clothes are neither rough nor damp, he will slumber sweetly and wake with a smile.

When a child begins to show that wonderful wee morsel of ivory called a front tooth, it must be looked upon as a gentle reminder that he would like—he would not object to—something with a little more stay in it than milk alone. Well, there is pap to begin with, and all sorts of ways of preparing it; if it be made from bread, the bread should be somewhat stale without being sour; you cannot be sure that there is no alum in it, or other deleterious substance, so it ought in all cases to be soaked for an hour or two in cold water, the water poured off, and the best of new milk added with a little sugar; the whole should be beaten with a fork, and beaten well too, to make sure that no lumps are left in it. Of this you may give two meals a day, and some children will want three. Still I greatly object to over-feeding infants, and I would much rather give a child less than he would take, remembering that it is not what he eats but what he digests that does him good, and that a distended stomach is, for the time being, a weakened, thin-walled stomach, which has not the power to mix the food. Never force a child to eat quickly, else the food will not get mingled with the salivary juice, and therefore will not assimilate. Always taste the food first to see it is not too warm, and that it is moderately sweet. I need not give receipts for other "paps," which may be made of biscuit, rusks, corn-flour, arrowroot, &c.; a nurse can always manufacture these, but they should be prepared with the greatest care and attention to cleanliness. If they are at all lumpy, or singed even, they will not agree. When about nine months old, a little nourishing soup may be given with the bread about once a day, instead of the milk. I am not in any great hurry advising this, however. Milk contains all that is required to supply the wants of infant life, therefore I say, milk, milk, *milk*, let milk be the staple of your child's diet till four or five years old. And here let me say parenthetically, that more good is often done by sending city children down to the country for three months than could be effected by a year's residence at the sea-side. Many a child I could tell you of who, having been put under the care of a kindly cottager or small farmer, from the pale and sickly subject it was when sent down, has developed in a very few months into your very beau ideal of happy, rosy, hard-fleshed health. And what wrought the change? Why, the change itself—new sights and new sounds, everything new and everything strange, and above all pure air and *pure milk*. The country has one other advantage over the sea-side as a health-resort for children, it is far less expensive.

It will be time enough when the child is a year old to begin to give him still more solid food; he will now relish puddings and eggs, and broth pap, but not until his teeth are well formed should he have flesh meat, unless indeed the family physician orders it. I know indeed at this moment of a child who, under medical advice, gets raw meat for dinner, finely minced, with an allowance of potato and bread, but she is an invalid. Meat is stimulating, and apt to heat the blood and produce skin eruptions. For children between the ages of two and five, there are a great variety of easily-made and easily-digested dishes. For breakfast nothing, I think, can beat oatmeal porridge made with milk. I challenge the world to give better advice than the following for making this excellent dish:—Let your oatmeal be somewhat fine, it is thus more easily and surely boiled; place your saucepan on a not too hasty fire, and add to the new milk therein a little salt; the very moment it begins to boil, commence to slowly and gently scatter in the meal with the left hand, while you stir it with a wooden spoon in the right, taking care to crush any lumps which may rise to the top. Do not let it boil too quickly, and when you think it is thick enough let it simmer for about five minutes before you take it from the fire; if it boils too long it is spoiled, if too thin it is not fit to eat. It is poured into saucers, and must be permitted to cool before being partaken of. Porridge may, for a change, be made of flour or good barley-meal.

Dinner for children should always be early, and about this let me remark that if beef or mutton be given, both of which, whether boiled or roasted, are highly nutritious, it should be cut up very finely or even minced, and the child should be taught to eat very slowly, and to masticate the food well. Children's food, like that of grown-up people, ought to be varied; change is always agreeable and conducive to good digestion. I like to see children sit down to a good dinner, and I delight to see them enjoy it, but hurrying over meals—and they are greatly prone to this—

should always be discouraged, while on the other hand nothing indigestible should be placed before them. Game of various kinds, as well as fowl, pigeon, and rabbit, make a very nice change, and so does white fish, with the exception of herrings and mackerel, or any other strong-tasted and oily fish. Although a little salt should always be sprinkled over a child's food, he should not be permitted to eat salted provisions of any kind, nor any such indigestible food as pork, goose, or even duck, and turkey should be given but sparingly. The stuffing generally used with these latter is very likely to produce a fit of indigestion, if given to a child. There are vegetables that a child may eat, and others that he ought not to partake of; potatoes, for example, turnips, and roots generally are very wholesome, but cabbage and greens are provocative of internal disturbance. Even potatoes, turnips, and parsnips, however, should be mashed; and here let me give a word of warning: they ought not to be mashed on the plate with the back of a fork; they will be lumpy if they are; the mashing ought to be complete and thorough. Puddings of sago, rice, or semolina, or even corn-flour, should always form part of the child's dinner, and suet dumpling, if eaten with syrup, makes a very nice change.

What should a child drink? Milk or water, or milk and water, with meals, or a very little tea or coffee well diluted with milk. Cocoa is most nourishing, I cannot indeed speak too highly in its praise. As to beer or wines, I should say never under any circumstances allow a child to partake of them, except under the orders or sanction of a medical man. The supper should be early, say six o'clock, and may be light pudding of any kind, porridge and milk, or bread and butter with milk-diluted tea. Children live fast, and be it remembered that they require more food in comparison to their size than grown-up people do, for they have not only to repair the waste of tissue, but to build and feed bone, and nerve, and muscle. Even between meals, therefore, if occasion demands it, do not deny them a crust of bread.

But lo! here I am almost at the end of my chapter, and, despite my title, medicines have been mainly conspicuous by their absence. And so, reader, I would very willingly let them be in the nursery; there is little need of physic where children are well cared for, well clothed, and fed in the way I have tried to indicate. If a laxative be needed, either a tea-spoonful of magnesia may be mixed in the pap, or a little fluid magnesia administered, but remember that magnesia too often given is apt to form concretions of a dangerous kind. A little grey powder may be given sometimes, if the child seem to need it. Castor oil warmed, so as to make it run easy, is a good laxative, the only objection to its administration being that force is required, and I know by experience that a child will sometimes struggle so against swallowing medicine as to cause itself mischief. Dill-water is a useful remedy to have in the nursery, and a tea-spoonful or two may be given when the child seems to be griped. Syrup of rhubarb is another harmless aperient, and one which will not weaken the child; but after all the less medicine you give the better, unless the child be actually fevered, and then it is time to send for the doctor.

GARDENING IN JANUARY.



PERHAPS some facetious merry-maker who has come down to spend Christmas with our readers may be tempted to exclaim, as his eye falls on the heading of this paper, "Gardening in January! What an incongruous pastime! As soon might we conceive of directions for snow-balling in July!" A glance, however, round the gaily-decked room in which he may chance to find himself—the old oak dining-room, perhaps, all floral with its evergreens, holly, Christmas roses, and green-house delights—or it may be a second but more furtive glance, *merely*, of course, at the ruddy *camellia* which is hiding its petals to such advantage in the raven tresses of some bright-eyed cousin who is laughing away so accidentally near the mistletoe—these two glances, we think, may possibly awaken an after-thought that he has made rather a donkey of himself for quizzing us about our "going a-gardening in January." We shall, nevertheless, take his piece of pleasantry in the utmost good humour. Neither Christmas nor New Year's Eve is a time even for a little quarrel; for those scarlet holly-berry letters on the wall spell out so distinctly, "Peace on earth." All the best wishes of the season, then, and "every happiness" to our joker and the gentle girl by his side.

No, we will tell them that nothing is going to put us out of conceit of this gardening hobby of ours. May we not indeed say that a quasi-divinity hedges about our handicraft? We are engrossed by the study of flowers, nor do we forget that the great Flower-Maker Himself was once "supposed to be the gardener."

To begin, then, forthwith. Camellias are an inviting subject on this cold and bleak January day; their colour is so bright and decided. Let us see what there is to be said about them this month. Those early sorts that may be about now coming into flower will require constant attention and watering. We have often said that the watering-pot, in so far as our *general* greenhouse stock of plants and cuttings is concerned, may be at this time of the year, except at rare intervals, almost discarded. Not so, however, must we treat these camellias as they begin to show for flowering. If we then neglect to water them, the buds will in all probability fall off. To encourage their early blossom—and naturally we are impatient to see

flowers again—we must, if possible, keep our greenhouse close, but, on the other hand, we must also avoid excessive fire-heat. Indeed, the same observations will apply to most plants as they approach the state of florescence. A want of attention to this matter of routine is, indeed, the cause of the failure and despair of many amateur gardeners. The fact is, and there is no denying it, we who can only afford a single greenhouse in which to grow or to shelter our entire stock of flowers and ferns, and perhaps a small grape-vine to boot, find it exceedingly difficult to "make both ends meet" in all the varied projects that we undertake. If we succeed in some of our experiments, we fail in others. Of course, the bulk of our camellia varieties comes into blossom a little later on in the early spring. The double ones are naturally the most admired and sought after. These, however, are best obtained by grafting upon good healthy plants of the single species. This operation is generally done, for the most part, from about September to February. Cuttings from the *single* camellias had, however, better be taken, say, early in July, as by that time the new young wood has become fairly ripe. Still, in our variable climate it is difficult to be very precise when specifying the particular time for any particular operation. Take, for instance, that extraordinary change in the temperature which we experienced in October last. We were enjoying what is popularly called St. Luke's little summer, and very little it proved to be, for twenty-four hours afterwards our trees were breaking down all over the country under their weight of snow, their foliage being yet upon them, while some of our gardeners who were a little behindhand in their work had hardly finished housing their bedding-out plants, which were now for a night exposed to several degrees of frost. Probably such a scene of desolation and destruction as many of our forests and orchards and plantations presented then has not been known in this country within the memory of any living man. Continuing, however, our remarks upon the routine culture of camellias, something may be said with advantage as to the kind of soil which they prefer. They succeed best, then, in soil compounded in equal proportion of good turf loam and sandy peat. Camellias, indeed, in fairly sheltered situations, and of the hardier sort, will even grow in the open, and can be trained up a wall; but it is rare, however, that this sort of experiment is attempted, as in very hard winters the buds will probably fall off shortly before they seem to give promise of future blossom.

Long, however, before the summer has really commenced, every class of camellia has done flowering, and the next thing that we have to think about is to foster and encourage in our plants the formation of new wood. For this purpose we give them, if possible, a little artificial heat. They like a moist atmosphere, and therefore we then give a good syringing, not only to the plants themselves but to the sides and flooring or ground of the house as well. But, like everything else, they want air, though they do not at this time want much of the power of the sun. The temperature, therefore, that they then require is, by day, something about sixty-four degrees, and not lower than fifty-four by night. One peculiarity about camellias is the extraordinary length of time that elapses between the first appearance and the actual expansion of the bud into flower. For instance, plants that have been treated as we have just described will have well-developed buds and new foliage by the end of July, but these buds will not be in flower until perhaps the following March or April. In July, however, our camellias are all turned out of doors. When properly potted, where necessary, set them all out then in the open, and stand them where they get plenty of shelter from the sun, for they are very shy of all heat. Stand them, too, on a board, and not on wet or damp mould, where possibly some worms may in time succeed in ferreting their way through the drainage-hole of your pot. Yet, if you were careful when repotting about draining your pot with potsherd, this ought under no circumstances to be possible. Until autumn has, then, well advanced, the longer your plants are out in the open the healthier and hardier will they be; for recollect that, after all, greenhouse heat and protection is at the best but artificial, and in a sense is contrary to nature. Soon after Michaelmas, then, house your camellias, and especially in the early winter be not too fond of a large fire. Unhappily, however, some gardeners heap on coals, alike forgetful of the possible result to the flowers, which is injury, or of the certain result in the coal-cellar, which is the rapid reduction of the supply inside.

Enough, then, just now about the camellias. Apropos, however, of the coal-cellar, one further hint might be given about the lighting and keeping of our flue, where, that is, no system of hot-water pipes can be had. Have during the whole of the year a large corner of your coal-cellar or out-house devoted to the gradual collection of ashes, to burn in the flue of your pit or greenhouse when the time for fires comes round once more. In addition to this, get in a little coke—a far less expensive article than coal; but gardeners always say they like a little coal to start their fire with, first of all, and perhaps there is some reason in this. Once well alight, however, ashes can be thrown on later in the evening, and these will burn well on through the night. Yet, no matter how cold the weather may be just now, the gardener or responsible person is bound to turn out of bed early on a winter's morning, particularly during the month on which we are just entering, whenever an intense frost prevails. More harm is done—aye, and fatally done—by idle neglect at this time of the year, between the hours of four and eight o'clock in the morning, than can be imagined. The fire has been allowed to go utterly out for two or three hours, the frost penetrates acutely, and perhaps a whole stock of plants that the day before looked in vigorous health has now toppled over, and is hanging listless, forlorn, and half shrivelled up over the flower-pots.

Those who value sweet-scented flowers at this time of the year should cultivate the daphne. Indeed, it is allowed that with care plants of this variety in a conservatory will keep in bloom for the entire year.



Plants, too, of the azalea or the heath order require just now very much the same treatment and temperature as the camellias. But a good day's work is worth having in the greenhouse during some wet or milder day, in going over and giving a good washing to the foliage of your entire stock. You will often find about this time of the year, especially after a long wet season, the leaves of your plants to be getting completely black. With a small piece of sponge, then, wash each leaf, using water a trifle above the temperature of the house.

It is a tedious process, but it will repay you for the labour you bestow.

In the open garden go over your rose-trees, and see to all the stakes and fastenings; carelessness in this respect will, when the next severe gale comes, probably involve the injury if not the total destruction of your standards. Indeed, anything which presents itself as a sort of sail to the wind—overgrown ivy, for example, which is too often allowed to flap about—should be curtailed or secured. Bulbs of any and all kinds should have been got in long before this, and yet it may not be too late if they are got in at once; but delay is as fatal in a garden as that premature impatience which some, on the other hand, show in their endeavours to anticipate the seasons. In fairly open weather such operations as box-edging or shrub-moving can be carried on; but take advantage of the hard frosty weather for all heavy wheeling of manure, &c., as this sort of thing done over your beds or across your lawn, immediately after a thaw, will get your land into a state very much resembling a country lane down which heavy carts and teams are constantly passing.

In the kitchen garden give some protection to your rhubarb and sea-kale. If you are not rich in many garden luxuries and appliances, mix up a few leaves with your small stock of manure, and scatter it lightly over the bed. Both your kale and rhubarb will be helped on by this; but for actual forcing, of course, you must use the usual large pots, and surround them with hot manure. Earth up what remains of your celery, and in very severe weather give protection by some litter. If you have any cauliflowers in frames, or under any kind of shelter, give them rarely any water, keep clear of dead leaves—at all times the most offensive things in a kitchen garden—and let them have air at every possible opportunity. From your winter spinach, if you are fortunate enough to have preserved any, pick for use only the largest and outside leaves.

In the fruit garden finish off at once the nailing, pruning, and securing of all your wall-trees, whenever, that is, the weather is sufficiently mild, damp, and open for the operation, for on no account must all this be done during a frost. We are often annoyed about this time of the year by the ravages of the small birds among the buds of our gooseberries and currants, which, as the gardener says, with some disgust, "they've been and gone and picked clean out." But never mind, we will not therefore prune these trees for the present; the trees, however, can be manured, and a little quick-lime thrown now around their stems may perhaps help us to ward off that provoking enemy the caterpillar, for inexorable time will soon be bidding us prepare for the spring, and the motto for all gardeners is "Look ahead." Just now, however, we are in the full tide of the Christmas holidays—the juveniles irrepressible with plans for future mirth; others, who have seen more of the graver side of life, wisely suggesting moderation in all things; one and all of us, let us hope, sternly resolved to do our duty in the new year, whether in the old garden or out of it.



ART-FURNISHING FOR THE DINING-ROOM.



THE general expression of an English dining-room should undoubtedly be comfort. Unlike the French, who give little heed to the surroundings of the meal, their whole attention being absorbed by the meal itself, we, not being nationally *gourmands*, demand something more. Our appreciation of a good dinner is not to be disputed, but we cannot enjoy it to the full unless our other senses are gratified. We demand not only that our food be good, but that we be able to sit comfortably at it, and that our eye shall rest upon agreeable forms and colours. Also, inasmuch as dinner takes place in nine months out of the twelve in our climate after dark, a sensation of enclosure, snugness, and warmth is desirable. Hence it is that dark-coloured walls, solid and easy chairs, pictures and draperies of comparatively heavy and warm colour have become, by a long-standing convention, *de rigueur* in the room devoted to the family meals. Even in the

days most benighted (æsthetically considered) we did not dine in a white and gold decorated apartment, or sit at table upon chairs covered with sky-blue satin.

For the wall-covering, crimson flock paper was for many years usually adopted. There are two reasons why this fashion may be advantageously superseded. In the first place, the colour is positive, stimulating to the eye, and therefore unsuitable for a background; secondly, the granular absorbent texture of the flock itself catches and holds a great accumulation of dust. Wherever flock paper is used it should always be painted, so as to stop the absorption, and to render it washable. Even then the horizontal surfaces formed by the top edges of the raised pattern will always be found to collect a considerable amount of dust. Painted flock, however, for some purposes, is most valuable. It is perhaps the cheapest and most effective way by which we can get a surface sufficiently varied to take off the monotony of a plain painted wall in cases where polychromatic flat decoration is not desired. For ceilings it is admirable, and although for large rooms the cost will be an obstacle to its use, for small rooms, recesses, and nooks we may frequently find it just the one thing wanted.

Supposing it to be decided to use for the walls of the dining-room some ordinary wall-paper, the question arises whether any particular class of colours or patterns are more especially suitable than others for this room. With very little qualification this may be at once answered in the negative. The act of choosing patterns and colours in wall-papers is, however, one which is so often rendered a merely irksome and bewildering task, the effect of the papers when hung is often so different from that which was anticipated, or is marred by some unforeseen defect, that a few words of suggestion on the general principles which should govern the selection of papers, not only for the dining-room, but throughout the house, may save some disappointment in the future, and some fatigue in the present.

In order to clear the ground, we may as well mention a few of the kinds of papers which need not be looked over at all, being unhesitatingly to be rejected.

1st. All papers containing any considerable portion of positive colours—untoned red, yellow, blue, green, purple, or orange—these colours wanting the retiring and subdued character necessary for the harmonious effect of a background.

2nd. All papers containing representations of objects, whether the human figure, birds, animals, flowers, fruit, and what not, treated in a pictorial or naturalistic manner. The objections to these are too obvious to need enumeration.

3rd. All papers purporting to represent, by means of shading, relief of surface, whether panelling, mouldings, shaded groups, in fact anything which suggests other than a flat surface. Beyond the obvious artistic reason for tabooing such patterns, there is a practical objection to them, which is that as the light must, from the nature of the production of the patterns by printing, be represented as falling on one particular side, the shadows will be cast in the most unnatural manner in the room, what would be right on one side of the room must necessarily be wholly wrong for the remaining three sides.

4th. All papers having large repeating patterns of any sort arranged geometrically over the surface. This is objectionable for many reasons, amongst which may be mentioned the enormous difficulty and waste in hanging them symmetrically on the walls, and the impossibility of arranging furniture and pictures against such patterns.

5th. All papers imitating materials other than paper, such as wood, marble, granite, lace, tapestry, tiles, and so forth.

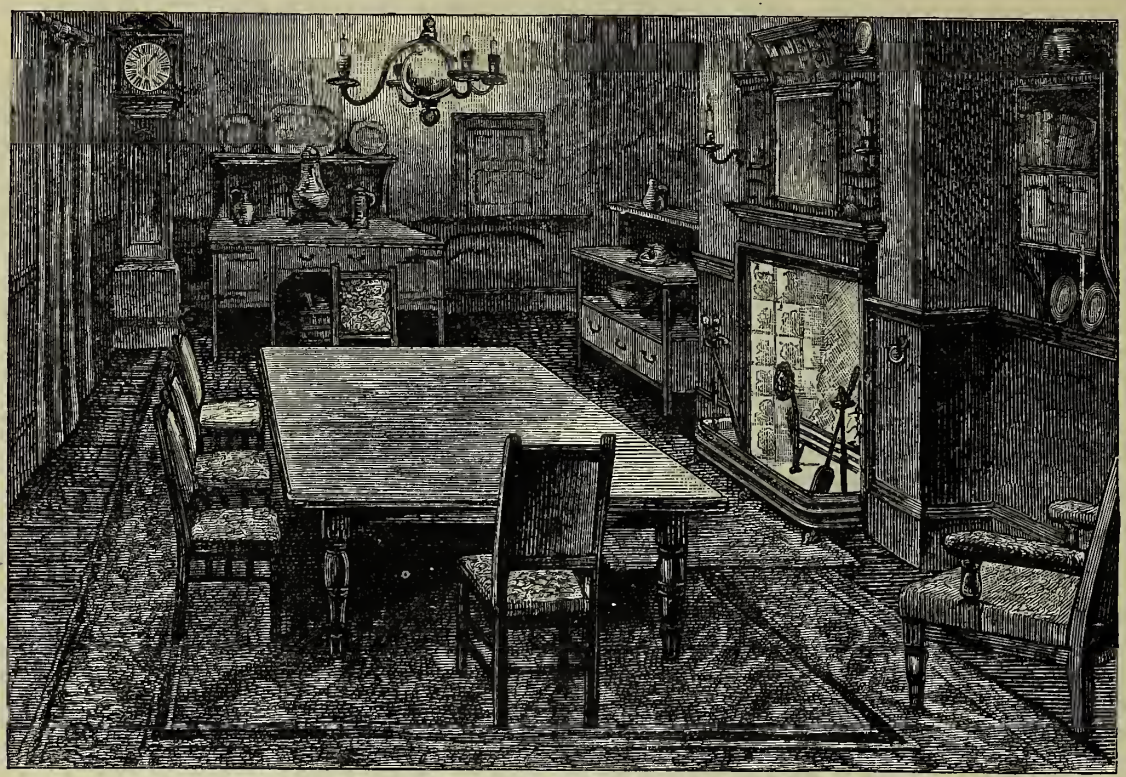
6th. All papers with pronounced vertical, horizontal, or diagonal disposition of the lines. Such papers invariably alter the apparent proportions of the walls on which they are hung, and should only be adopted where, from some cause or other, it is desirable to modify an apparent excess in height or width. For instance, vertical stripes tend to make a room appear higher than it really is; a horizontal treatment, on the other hand, gives an appearance of greater length. See page 113.

This is by no means an exhaustive list of what to avoid, but it will materially help to reduce the number of patterns which must perforce be turned over. It must not be thought that after the rejection of the different varieties of papers enumerated above, one is restricted to a very limited number of patterns, as there are at the best paper manufactories certainly a large majority of papers which will not fall under any of the heads of our *Index Expurgatorius*, among which the variations of individual taste will have ample scope for selection.

There is one point, however, which is well worth looking strictly after; a point the neglect of which has often been the cause of disappointment after the paper is hung. It is a fault that frequently appears even in the best-designed papers, and consists in some feature of the pattern being more strongly marked than the remainder, and which will therefore stare out on the finished wall at regular intervals, forming a sort of large secondary pattern. In the pattern piece it may be only slightly, if at all observable. Possibly it may be only a slightly increased surface of undecorated background, or a couple of leaves or flowers placed too near each other. It is, indeed, very rarely that a trained eye fails to detect some taint of this defect, as it is exceedingly difficult in irregular, *all-over* patterns, entirely to avoid it; but it should always be borne in mind, and, other things being equal, the paper with the least appearance of it should be selected.

If the paper is to be varnished, it is well to ask if it is one that will admit of it, as some heavily-coloured papers can scarcely be sized without rubbing off the colour. The depth of colour is so materially intensified by the application of varnish, that it is safest to make an experiment before finally deciding. The usual rough means of ascertaining the effect of the paper when varnished is to wet a small portion of it.

As a rule, papers containing two, or at most three



THE DINING-ROOM.

tints of colour, or better still, two shades of one colour, are better in effect than the more expensive patterns with a great variety of colours. It will also generally be found that a quieter and more subdued effect is obtained in papers in which the background is *darker* than the pattern. The effect of a dark pattern on a light ground, especially if the difference is considerable, is less suggestive of enclosure, and gives somewhat the appearance of looking beyond the pattern into space. There may, however, very well be markings, outlines, or what not on the pattern darker than the ground ; it is sufficient if the general average of the pattern be lighter. One very satisfactory arrangement is to have the pattern but very little lighter than the ground, and outlined with a tint still lighter than the pattern.

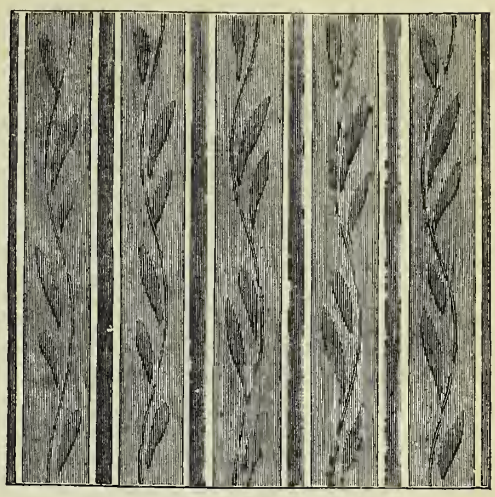
Concerning the use of gilding on papers, or *metals*, as they are called, it is safest as a rule to avoid them altogether. Much gilding in a room is vulgar, and moreover the Dutch metal used by the paper-makers is certain in a very little while to blacken, and thus entirely alter the effect of the wall. Even, however, supposing the gold to last bright, its sheen, like that of any other polished surface, is apt to look different in different lights, to borrow the hue of the objects it reflects, and by its variety and glitter is irritating in effect, and contrary to the retiring and subdued character required in a background.

I have carried the suggestions on the choice of wall-papers thus far so as to exhaust at once as much as seems necessary to be said on the subject in these papers. Any division of the classes of papers into those especially suitable for particular rooms is purely arbitrary, and the choice must ultimately depend much upon accidental circumstances, aspect, and so forth, as well as individual feeling for fitness and propriety.

Supposing, then, our dining-room papers satisfactorily selected, we must now fix upon the height of the surbase or chair-rail. As the latter name implies, this feature of a room was ordinarily fixed at the height of the backs of the chairs, for the obvious purpose of keeping the latter from the wall against which they were ranged. Our modern chairs are, however, as a rule, lower than the old ones, while our rooms are more lofty in pitch. It has thus come to pass that a dado of the height of the chair-backs is disproportionately low, and it will generally be found better to raise it to about four feet, or rather higher. The chief thing to avoid is cutting the wall exactly in halves ; so that in cases where a high dado is required it is better to boldly carry it up to a height of six or seven feet, treating the upper part of the wall as a frieze. Wherever it is possible I would certainly recommend the dining-room dado to be panelled in wood, which, if in deal, and with flat panels, and square (*i.e.*, not moulded) framing, need not be very costly. Even varnished paper is liable to be knocked about, and if actually torn or broken cannot easily be patched, whereas well-painted or stained wood will stand a great deal of wear, and at the worst a coat of paint will set all right again.

The ceiling is best coloured in distemper in some light tint of the ruling colour of the walls, and the cornice may be coloured in a deeper tint of the same, approximating more nearly to the wall-colour. Papered or otherwise decorated ceilings are more interesting and effective, but for cleanliness and health's sake it is better in a dining-room to have an easily renewable surface on the ceiling. If the room be very lofty a frieze will add much to the general effect, and give an appearance of increased lateral spaciousness. This should be separated from the room below by a simple wood moulding, and may be distempered in flat colour, or an appropriate paper hung thereon. The plaster cornice round the room we must perforce leave. If it happen to be one consisting of simple mouldings, without the so-called "enrichments," we are so much the more fortunate; if not, we can at any rate avoid accentuating the ugliness of the ornaments by "picking them out" in various tints. This trick, a favourite one with the commonplace decorator, is never commendable; for if the mouldings be refined, and the ornaments carefully designed and well modelled, the various forms will naturally fall into their proper places, and can be properly appreciated only when of one uniform dead colour. On the other hand, if they are ugly their ugliness will generally be only brought more prominently out by polychromatic decoration. The centre-flower may usually, however, be taken away with advantage; a simple moulded boss of circular or octagonal form, and about six inches in diameter, will be sufficient to make the chandelier hook grow without abruptness out of the ceiling, which latter will gain in size and lightness by the alteration.

The woodwork of the room—architraves, doors, windows, shutters, and so forth—we must, of course, leave as it is found, excepting as to its decoration. This should be confined to painting, and wherever funds will allow, it should finished with a flatted surface. The colour should be one which *melodises* with the colours in the papers, and not, unless in special cases, one which contrasts with them. It need not be as dark as the dado if the latter is hung with varnished paper, but should usually be a little darker in tone than the general tint of paper on the upper part of the walls. The panels of the doors and shutters may be a little darker than the rest. Picking out the mouldings in different tints is not to be recommended, as it emphasises the fact of the mouldings being merely stuck on instead of being, as they ought to be, worked on the edges of the framing.



WALL-PAPER—VERTICAL TREATMENT.



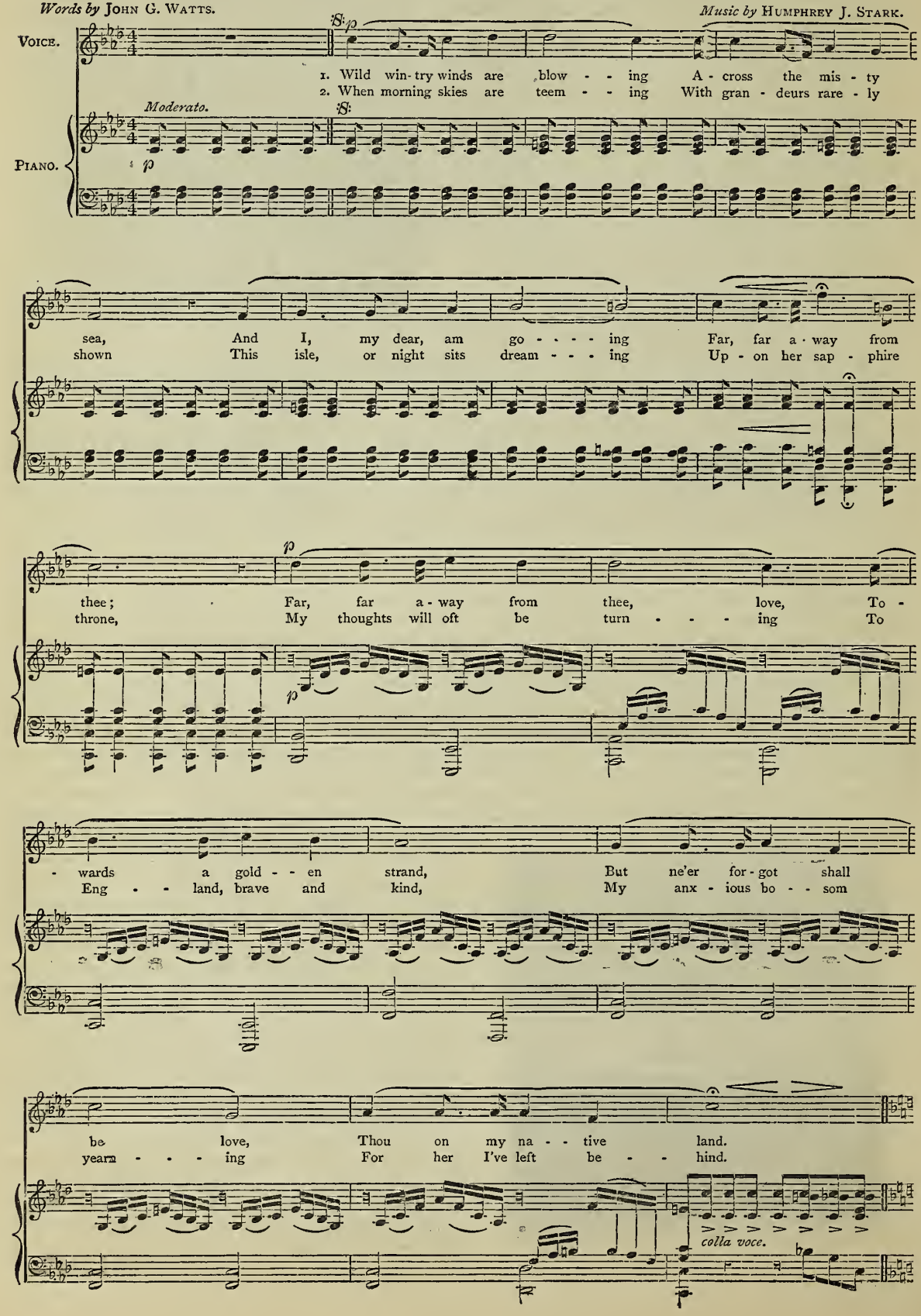
WALL-PAPER—HORIZONTAL TREATMENT.
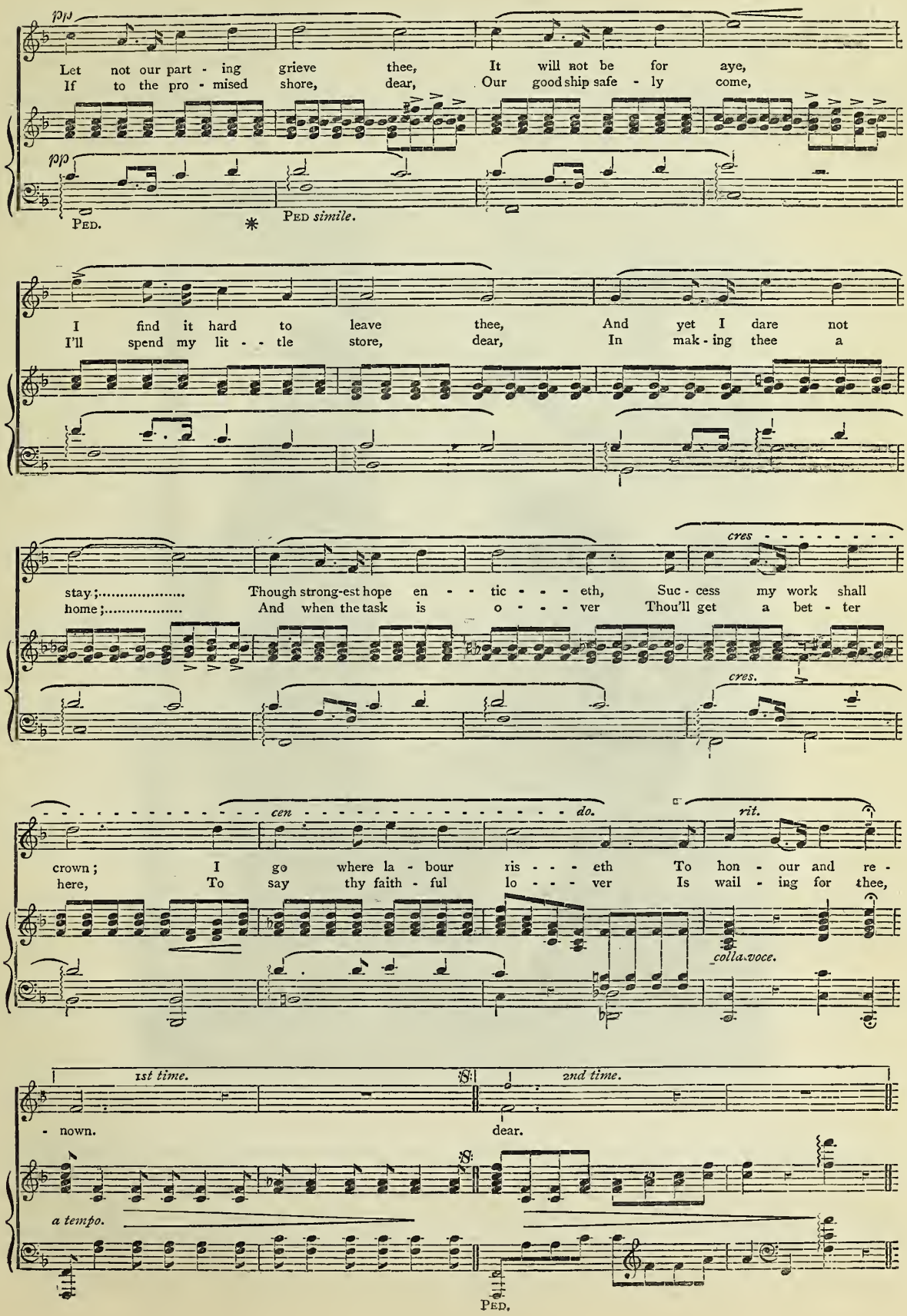
Coming now to the floor, we have, as usual, the choice of several modes of treatment, depending partly on the condition of the flooring-boards, and partly on the expenditure available. As the carpet will cover a large part of the floor, we may confine our attention to the margins. The simplest and cheapest treatment is to stain them dark oak, and varnish. If the boards are in very good condition and of tolerable grain, it will be better not to stain them at all, or at most very slightly, and wax-polish them. This, however, forms a surface that requires frequent labour to keep in condition; and varnish, although inferior in effect, will usually be found most satisfactory. A more expensive but entirely unobjectionable plan is to lay the margins with the recently-introduced thin parquet. This is scarcely an eighth of an inch thick, and if thinned off at the edges the difference of level is scarcely felt under the carpet. It is very durable, improves in appearance with age, is very cleanly and wholesome in wear, as it presents no holes or cracks for dirt to accumulate in. The first cost, too, is not very great. In the cheapest and plainest patterns it can be supplied, the floor prepared, and the parquet glued down and polished, from about eighteenpence the square foot. With a width of two feet six inches a moderate-sized dining-room could be done for about £15. If elaborate border patterns, however, be selected, the cost is quickly doubled and trebled.

In the next paper the question of furniture will be briefly discussed, first generally, and then with particular application to the dining-room. The illustration on the opposite page gives a general view of a moderate-sized dining-room, with the usually required articles of furniture.

Wild Wintry Winds are Blowing.

Words by JOHN G. WATTS. *Music by* HUMPHREY J. STARK.




pp
Let not our part - ing grieve thee, It will not be for aye,
If to the pro - mised shore, dear, Our good ship safe - ly come,
pp
PED.
*
PED simile.
I find it hard to leave thee, And yet I dare not
I'll spend my lit - - tle store, dear, In mak - ing thee a
cres - - - - - - - -
stay;..... Though strong-est hope en - - tic - - - eth, Suc - cess my work shall
home;..... And when the task is o - - - ver Thou'll get a bet - ter
cres.
cen - - - - - - - - - - - - - - - do.
rit.
crown; I go where la - bour ris - - - eth To hon - our and re -
here, To say thy faith - ful lo - - - ver Is wail - ing for thee,
colla voce.
1st time.
2nd time.
- nown.
dear.
a tempo.
PED.

ONE HUNDRED POUNDS REWARD.

I HAD been six years a surgeon in the navy, and for the last two of those six years I had been cruising on that dreadful Gold Coast. Perhaps I was not the best-tempered man in the service, but I thought I was badly treated. The Admiralty and I had all went well with us. But we were not to escape our share of trouble. My health, which had suffered more seriously than I imagined during my period of service, broke down; my practice went to the dogs; we got deeply into debt; and, to make a long story



"I FOUND MY WIFE WAITING ANXIOUSLY FOR ME" (*p.* 118).

a slight disagreement, and the end was that I threw up my commission in disgust. My health was much broken, and while I was recruiting my strength in a little Devon village, I did the one thing which I have never regretted—fell in love with a good girl and married her. I had a certain amount of money, which I invested in a country practice; and for some time short, three years after our marriage, one miserable Sunday in November found my wife and myself, with our two little children, occupying a single poor room in Grenville Street, off Guildford Street. We had then been in London about six months, and I had been unable—chiefly on account of my precarious health—to get anything to do. About a month, how-

ever, before the day I speak of, my only friend in London had held out a hope of obtaining for me the post of private physician to a wealthy relation. But my friend had been compelled suddenly to go abroad, and though he was daily expected back, yet three weeks had now passed, and I had gone to his house in Kensington day after day without getting any tidings of him. Meanwhile our little stock of money was quite exhausted; everything that could be spared was sold or pawned; and on this Sunday evening, with a month's rent due next day, my wife and I sat before a miserable apology for a fire, with absolute want staring us in the face. We had not quite a shilling left, and when I looked at my sleeping children and thought of the future, I fairly broke down in utter despair. It was then I found what a treasure I had in the noble woman by my side. Affecting a cheerfulness which she could not feel, she imparted to me a portion of her own courage, and at length induced me—anxious to please her and glad to do anything rather than sit powerless—to go once more to my friend's house.

It was ten o'clock, on a cold drizzling night, when I set out on my walk. I somehow felt a kind of fictitious hopefulness, and walked briskly, resolutely shutting out the thought of failure. I stood some time at my friend's door before I dared to ring the bell that would change my hopes or my fears into certainty; and when at last the servant who answered my ring told me that her master had not yet returned, I fairly staggered into a chair in the hall, overcome with disappointment. The woman, seeing my condition, brought me a little brandy, which revived me somewhat; but it was some time before I felt able to move, and it struck midnight as I left the door for my long and cheerless walk. The rain fell in a steady drizzle, but though I was lightly clad I never heeded it; my thoughts were fixed on my poor wife sitting alone and watching for me, and on the wretched news I was bringing her. I walked on, heedless of the bitter cold and of the constant rain, feeling the numbness of misery in my heart.

How it happened I do not know, but somehow I lost my way, and after wandering aimlessly for some time, I found that I was in a street I did not know—the Gray's Inn Road, as I afterwards learned. I could see no one to direct me, and was walking on rather anxiously when I stumbled over the form of a man, who was lying half in and half out of the covered entrance of a wretched court. For a few yards I walked, too much absorbed in my own troubles to think of anything else; but then, thank God! I thought of the unfortunate man lying in the rain, and as a doctor, felt, more strongly perhaps than I otherwise should, that it was my duty to go back and assist him if possible. There was a gas-lamp in the entrance to the court, and by it I was enabled to see that the prostrate figure was that of a singularly tall and powerfully-built man; and on a closer inspection I was surprised to find that his dress was that of a gentleman. At once I thought he had been robbed and perhaps murdered; but, taking his hand to feel his pulse, I saw that he had a remarkably handsome diamond ring on his finger; and the beating of his pulse, though very faint, showed me that he was not dead.

Then I thought, with something of contempt, that I had a case of mere drunkenness to deal with; but yet on careful examination I could detect no fume of spirits, and the faint action of his heart at length convinced me that the man was in a state of complete exhaustion, probably from want of food.

With considerable labour, in my weak condition, I managed—half lifting, half dragging him—to convey him into the covered passage, and determined to stay with him until some passer-by would assist me. I had not waited long when a half-tipsy woman, walking past, looked into the passage and came over to see what was the matter. She looked keenly at me and at my unconscious patient, and I noticed her eye gleam as she caught sight of a massive gold chain on his vest.

I asked her to go at once and fetch assistance, but she immediately replied that I need not trouble myself any further—"I know him well: he's Rooney that owns the public-house close by; I'll get him home all right."

At first her assurance almost imposed upon me, but when I looked at the pale aristocratic face that I supported on my knee, I felt convinced that she had invented the story with a view to plundering the helpless man. I told her sternly that if she did not go for a policeman I would do so myself. She went off hurriedly—as I thought, for that purpose—but came back no more; and now I was once more alone with my strange patient, and as the minutes went by I knew not what to do.

Help, however, was near. I noticed a poor girl—she did not look more than sixteen—walking slowly on the other side of the street; I called to her, and after a moment's hesitation she came over. I briefly explained to her the circumstances, and asked her, if she possibly could, to get me a drop of cordial, or the man would die.

"I have only got fourpence," she said, in a kindly Irish voice, "and I was going to pay for my bed with that at the kitchen in Fulwood's Rents; but, sure, I'll get something from the chemist instead, and I'll trust to God for a night's lodging—I've slept out before now." And away she went—surely not the worst of Good Samaritans.

Very soon she returned with the medicine, and I sent her again to fetch a policeman. I forced a little between the man's teeth, and presently he came to and opened his eyes. I asked him how he came there: he said, "Tired and starving." And then I asked him where he came from, and he suddenly brightened up, and looking keenly at me for a moment, said, "Edinburgh;" but from the way he said it I felt convinced he was deceiving me, and shortly after asked the same question again, and he, with the same look, said, "Glasgow."

In his weak state, however, I forbore questioning him further, and a policeman presently coming up,

we got him into a cab and took him to the hospital, where I waited until he was put to bed. Before I left, I asked the house-surgeon to give a shilling to the poor girl—Mary Kennedy was her name. He readily did so, and she went off to sleep in "Old Walter's" lodging-house in Fulwood's Rents.

When at last I got home, I found my wife waiting anxiously for me. However, when I told my story she forgave the delay, and in talking over the strange circumstances of the night we forgot for the time our own troubles. My wife insisted that something good would come out of the matter, and at eight o'clock next morning she roused me and made me set off for the hospital. As I was on my way there, my eye was caught by an advertisement on a hoarding :—

"ONE HUNDRED POUNDS REWARD.

"A Gentleman of unsound mind has escaped from the M—— Private Asylum. The above reward will be paid to any person finding him and restoring him to his friends."

Then followed a description which exactly tallied with the appearance of my patient. Everything was now clear to me, and I fairly ran to the hospital.

Here, however, my hopes were damped, for I found that Policeman Z had gone there before me and told a story very different from the true one which I have narrated, and had actually gone the length of warning the authorities against me. The solicitor whose address was given in the advertisement had been sent for, and the worthy constable had evidently determined to brazen it out and secure the £100. I saw the house-surgeon, and told him the whole story. He thought for a few moments, and then said, "We must get that girl at once."

I went myself immediately to the wretched den where she had stopped, and brought her back with me. A very short examination before the solicitor settled Policeman Z's case; and an hour afterwards I was able to go back to my wife with more money in my pocket than I had had for many a long day.

But that was not the best of it. I visited my patient —who was no other than the wealthy baronet, Sir Charles Frampton—every day. He seemed to take a strong liking for me, and when he was well enough to be moved his friends proposed that I should take him under my care. He was perfectly harmless, and after residing abroad with us for a couple of years, he so far recovered that he was enabled to dispense with my services, and to manage his own affairs. He showed his gratitude, however, in most princely fashion: settled an annuity on poor Mary Kennedy (she had previously been liberally rewarded by his friends), and bought me the practice which I still hold. From that day everything has prospered with me, and I am now rich enough to leave the work to my eldest son, and amuse myself in writing some of the curious incidents of my life, not the least strange of which is the providential occurrence in the Gray's Inn Road.

A. M.

A "NICE LITTLE DINNER."

BY A. G. PAYNE, AUTHOR OF "COMMON-SENSE COOKERY," ETC.

THE present season of the year is essentially one of good cheer—of the good old-fashioned English sort, consisting more of substantial dishes suitable to cold weather than of light French entrées, which are in reality adapted for warm climates rather than an English Christmas. It is not often that our cold season sets in so early as it did this winter; and of all dinner parties given throughout the year, perhaps none is so well known as the nice little dinner given on the 9th of November last to a number of distinguished guests assembled at the Guildhall on the occasion of that feast of feasts, the Lord Mayor's dinner. But here let me pause—I say that feast of feasts; and let me at once explain that the chief feature of this feast, and the one that makes its reputation so world-wide, is not that it gratifies the mere animal appetite, but that it affords a far higher enjoyment, namely, "the feast of reason and the flow of soul." It is not, however, my province now to enlarge upon the real *bonne-bouche* of the entertainment, the eloquence of the distinguished statesmen who annually accept the well-known hospitality of the chief of our great City dignitaries, but simply to run over the bill of fare which was placed before them on the last occasion of this almost national event, and to consider if we cannot ourselves pick up some practical hints that may benefit our own more humble establishments.

I will first give the bill of fare exactly as it was presented to the guests, who, I believe, numbered somewhere about 900 at the last great City feast on Lord Mayor's Day :—

GUILDHALL, TUESDAY, NOVEMBER 9th, 1880.

MENU.

POTAGES.
Tortue, et Tortue Claire.

RÔTS.
Dindes à l'Anglaise.
Perdreaux. Faisans. Pluvieurs d'Or.
Oisons.

RELEVÉS.
Petits Poulets Rôtis. Dindonneaux Piqués.
Chapons en Galantine. Dindes Braisées. Pâtés de Pigeonneaux.
Pâtés à la Périgord. Jambons de York.
Langues de Bœuf à la Moderne. Roularde d'Agneau.
Quartiers d'Agneau. Barons of Beef.

ENTREMETS.
Salades de Homard. Buissons de Crevettes.
Gelées à la Séville, Gelées au Vin.
Crêmes à la Vanille. Chartreuses aux Fruits.
Petits Pâtés de Noël.
Meringues à la Crême. Gâteaux à la Bagatelle.
Croûtes à la Nemours. Pâtisserie à la bonne Femme.
Fruits et Glaces.

Our first impression may possibly be, why is it always necessary to have our bills of fare in a foreign language? There is, however, one crumb of comfort to John Bull, particularly seasonable, and that is that the most substantial of all the dishes in the *menu* in question seems to have no foreign equivalent. Let us first, at the present beef-eating season, congratulate ourselves on the fact that the distinguished *chef* who prepared the above repast cannot find the French for "baron of beef." Unfortunately, I observed, I wish to be practical—and while priding ourselves on our "baron," what would Mary Ann say were we to bring home a "baron of beef" for to-morrow's dinner? A good-sized "baron of beef" is like a gigantic saddle of mutton, being two sirloins joined, the weight sometimes being as much as 100 lbs.—a joint that would, to say the least, be somewhat inconvenient to roast in an ordinary close range. So let us return to our bill of fare. First, the two soups, thick and clear turtle, are, like our "baron," not easily prepared in private establishments, except turtle made from dried turtle-flesh, a description of the proper mode of making which would require an article all to itself. The next point we notice is that we have no fish, and I think those who really appreciate "turtle" will admit that this delicious amphibious creature is quite fish enough in itself for all practical purposes. Then we see that game follows. The old fashion of serving game and poultry—to many the nicest part of the dinner—after a long series of entrées, followed by joints, is here departed from, and rightly so. The *rôts* are as follows:—Turkey, roasted English fashion, partridges, pheasants, golden plover, and goslings, or, as they are more often called, green geese. I would here remind you that a green goose has no stuffing, but is cooked like a wild duck; indeed, sage and onion would be terribly out of place early in a big dinner. Next come the *relevés*—roast chickens, young turkeys larded. Turkey is a dry meat, and is much improved by being larded. Larding, I need scarcely explain, is threading little strips of fat bacon through the flesh so that a little piece of each end of the strip of fat sticks out, the centre being in the meat. This is, of course, done before roasting, and has the effect of keeping the meat moist. Remember, in larding, to think of which way the meat will be cut, and lard across, so that the strips of bacon are cut across and do not appear whole, otherwise you would have lumps of fat appear on your plate.

The next dish—*Chapons en Galantine*—is, I fear, beyond the ordinary cook's art. I will briefly describe it. It is a boned capon, stuffed with a forcemeat made from veal, fat bacon, calf's udder, mushrooms, eggs (mixed with truffle), and tongue, and a good deal of seasoning. It is tied up tight and allowed to get cold; it is then cut into thin slices, and aspic jelly is usually served with it. Braised turkey is a turkey cooked in a large stew-pan or braising-pan, the turkey being first covered over with very mild fat bacon—bacon that has never been smoked—and some stock being added, with onions, carrots, a little garlic, thyme, bay-leaves, &c. The turkey should be cooked slowly, and the liquor in which it is cooked should be strained off and reduced by boiling, and poured over it. Some vegetables boiled in the liquor may also be served with it. This is a good way, though a troublesome one, of cooking an old and tough turkey—not that we mean to insinuate that old turkeys were used on the occasion to which we refer. *Pâtés de Pigeonneaux* are simply patties made with young pigeons, and we may learn from this the well-known fact to good cooks that good pigeon-pie cannot be made from old pigeons. The young pigeons must, however, be sufficiently old to be plump. *Pâtés à la Périgord* depend chiefly upon the *Périgneux* sauce. The flesh of a young hare is very good for the purpose, simmered with sliced truffle. The sauce is made from truffle trimmings, which can now be cheaply bought in tins; these trimmings are allowed to simmer gently in some good gravy, with some lean ham, thyme, and one or two bay-leaves. The whole—*i.e.*, the meat cut up small, and the sauce, which must be reduced and thickened—is mixed up, and the patty-cases filled with it.

The ham and tongue need no comment. *Roulardé d'Agneau* is a saddle of lamb boned and stuffed with forcemeat, rolled and tied up, then covered with fat bacon, and braised for some time in rich stock, in which some sweet herbs, celery, &c., have been placed. This should be allowed to get quite cold in its liquor, so as the flavour of the liquor settles in the meat, on the same principle that a ham should be allowed to get cold in the liquor in which it has been boiled. When quite cold, take out the roll, remove the stock clinging to it as well as on the fat bacon, and smooth it over with some strong stock nearly set till the outside presents an even surface. When this is again cold, egg and bread-crumb the whole, and make it hot in a very brisk oven. Some of the stock in which it was cooked can be strained and served with it, being poured round and not over it. I will pass by the quarter of lamb, the baron of beef, and the lobster salad; next follow *Buissons de Crevettes* or, literally, a bush of prawns. The best way of serving prawns, so that they look ornamental, is to cut off the end of a lemon so that it stands upright, and then stick in the prawns by the prong from the head side by side, till they assume a bell-like shape and entirely conceal the lemon. Little pieces of double parsley may be used to fill in the chinks, and parsley placed round the base of the dish. The orange jelly, wine jelly, and vanilla cream we will pass, and simply explain that *Chartreuses aux Fruits* are preserved fruits served up in a shape—*i.e.*, they are placed in a mould and turned out. The chief point to be observed is to make them keep their shape without being too much set. The next dish is very seasonable. *Petits Pâtés de Noël* is simply another name for Christmas-pies, or rather mince-pies; and as by this time the mincemeat is already made in every well-ordered household, any recipe for making it would be out of place. *Meringues à la Crême* are cases of whipped white of egg and sugar baked, hollowed out, and filled with cream. *Gâteaux à la Bagatelle* are cakes of some sort, but what sort I do not know. Probably *à la bagatelle* means they are very light

—possibly sponge-cakes. *Croûtes à la Nemours* are pieces of bread fried in butter a light brown, nice and crisp, like rusks, with a slice of some rich preserved fruit placed on them. *Pâtisserie à la bonne Femme* is another sweet about which I am not certain. Perhaps our "maids of honour" will translate it—*i.e.*, a rich sort of cheese-cake for which Richmond is famous.

I have described this famous national feast of November last to the best of my ability from simply perusing the bill of fare. I trust that I have been able to give my readers a fair idea of it as a whole.

WHAT TO WEAR.

CHIT-CHAT ON DRESS. BY OUR PARIS CORRESPONDENT.



WITH the New Year comes generally a variety of social gatherings, in most of which children, and young people not yet out, take their part. I will, therefore, describe a few pretty frocks I have seen preparing. For a fair child blue is always becoming, and a new sort of elastic jersey, woven like the openwork of silk stockings, looks pretty in this colour, worn with a skirt of nun's cloth, or voile religieuse, of the same shade, made with a folded scarf-tunic; beneath this a short tunic, forming two points in front; the skirt box-plaited. Soft white Chinese silk, trimmed with lace and pearls, is as charming as any combination I know, made with three gathered flounces edged with lace; a tunic caught up in the front with satin ribbon, and bordered with lace, headed by a row of close-set pearls; the high bodice gathered in a succession of circular drawings at the neck, drawn in at the waist, the all-round basque forming box-plaits; a ruff at the throat of lace and pearls; the sleeves to the elbow slashed on the outside, the slashings bordered with pearls. To be really fashionable, a child's dress cannot be too picturesque; and even for evening, little plush frocks are being made with capes just reaching to the shoulders, and a ruff at the throat. The two colours which are most affected are brick-red and peacock. People less artistically inclined choose white plush, or pink, or blue. The skirts are generally plain, with a balayeuse peeping below. The white sleeves, coming to the wrist, are often cut on the cross, leg of mutton fashion, with loops of satin ribbon forming a trimming round the armhole; the bodices pointed in front, laced at the back; a band at the neck, and a ruff above it. Plain bodices occasionally, too, have a linen cape bordered with lace reaching to the shoulders, and cuffs to correspond turning upwards at the wrist. Stockings matching the colour of the dress exactly are *en règle*, and dainty shoes; the hair flowing on the shoulders or plaited.

For older girls pretty dresses are made of white (not cream) Indian muslin, trimmed with lace, and also of Spanish lace, now made in cream, pink, and light blue. The skirts are mostly short, or of only a walking length. The mode of arrangement is simple, but skill is required in draping the tunic or over-skirt. A puffing or a flounce borders the edge of the skirt, and the Spanish lace net meets this, forming a long tunic in front, and a draped elongated puff at the back. The bodices are often banded, and made *à la bébé*, gathered. Wreaths are superseded for quite young girls by a flat band of some small flower and leaves, laid just at the back of the curls, or by a tiny bouquet on one side, which is secured by an invisible wire passed to the back of the coil.

Young ladies in evening dress wear long gloves, and require no bracelets. Armlets instead of bracelets are coming in, possibly because a bracelet does not look well over a glove, and above the elbow they have a chance of being seen. Young people wear mittens except when dancing, and with long sleeves they are most suitable. Cashmeres and thicker materials of the kind have the fulness of the skirt mounted in tiny box-plaits all round alike, and these are met by a series of gatherings, below which the skirt trimmings start; this gives great slimness to the figure. But with all this fashion for slimness there is danger that young people should neglect to wear a proper amount of underclothing. Doctors tell us over and over again that in our climate it is most necessary to wear flannel; but the rising generation will not see the necessity, because it tends to make their figures look fuller. The folly of this can hardly be represented too strongly. There is no cosmetic in the world like health, and nothing so necessary to beauty as health. Colds and a low temperature of body give a pinched, hard look to the face, besides laying the seeds of most of the illnesses which mar the enjoyment of life. It is very difficult to be happy without health, and surely it is madness to sacrifice so much for so little. Good plain food, suitable clothing, and regular exercise are among the best preservatives of youth. Besides, vests and warm underclothing are now made of the thinnest fabrics; if silk is too costly, and merino too thick, adopt

Indian gauze, or better still, Shetland wool. Both are made now almost as thin as a spider's web, adjust themselves perfectly to the figure, are cut properly low at the neck and short in the sleeve, as well as high to the throat and to the wrist.

There are many new and fashionable winter materials now worn in France, and most of them have a lustrous surface, plush taking the lead; and it is in mixing dull and bright materials of the same tone that the French excel. As many as four stuffs often appear in the same dress—velvet, plush, cashmere, and satin—made up on a silk foundation. Never at any time was more attention paid to having all materials of exactly the same dye. Surah and satin de Lyon





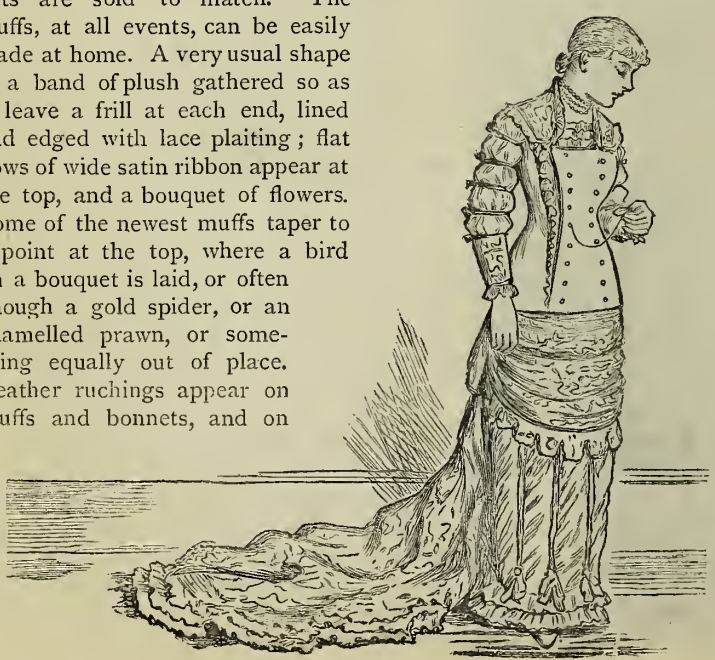
are still much used, especially in evening dresses. Dahlia is the prevailing tone in England, but grenat in France, and what is known as sparkling Champagne for light fabrics.

Every year English and French fashions are drifting further apart. French people certainly choose costumes which a few years ago would only have been considered fit for a fancy ball. Witness the white woollen Marguerite dresses worn by the *grandes dames;* but artistic gowns, as recognised in England, are unheard of in France, and inspire the Parisians with horror. A lively Frenchwoman tried to explain to me some of these toilettes she had recently seen in England. A young girl—a *brune*—with heavy features, and abundant hair cut in a straight line about the face, like the boys in Murillo's paintings, had worn a dark green merino dress, the plain skirt gathered to the full short-waisted bodice, and worn with a turn-down collar fastened with amber bows, which bows appeared also at the wrist of the tight sleeves, made with one deep puff at the elbow. Another, who

adopted a particularly sad, distraught countenance, and the roughest of touzzled heads, had selected Indian-red soft silk, made with a wide Watteau plait at the back, and a full-banded bodice with tight sleeves. A fairer beauty, with a fringe of hair standing out two inches at least from her forehead, wore a low square dress made of Tussore silk, with the Watteau plait, the front gathered but cut in one with the skirt, and not drawn in at all to the figure—a veritable smock. It is undeniably true that such toilettes prevail among a certain coterie in England.

The French have their eccentricities too, but they develop themselves chiefly in the matter of ornaments. They have done the pig to death, and it is banished, let us hope, permanently to its sty. Now these pendant ornaments are supposed to denote the profession, hobby, and particular taste of their wearer, akin to the pretty fashion of adopting a certain flower for one's own. A little palette set with jewels denotes artistic tastes; a lyre, musical *penchants;* a lamb, the insignia of the golden fleece, has been adopted ever since the eyes of the world have been directed towards the young Spanish queen; and a lizard in the form of a bracelet crawling up the arm is another popular ornament. And so artistic has Paris become that the brims of hats are painted with some device, often a huge sunflower, Easter lily, or any very decided bloom. English people, I am inclined to think, have more method in their madness. We have some reason for our follies — expediency or comfort is at the bottom of most of our inventions; in Paris they spring from the caprice of the moment. The muffs, or the apologies for muffs, which are so ornamental and so useless, are being supplemented by hand-warmers, resembling in form a large medicine-bottle, covered with plush, and sometimes having a pocket attached. Muffs and bonnets are sold to match. The muffs, at all events, can be easily made at home. A very usual shape is a band of plush gathered so as to leave a frill at each end, lined and edged with lace plaiting; flat bows of wide satin ribbon appear at the top, and a bouquet of flowers. Some of the newest muffs taper to a point at the top, where a bird on a bouquet is laid, or often enough a gold spider, or an enamelled prawn, or something equally out of place. Feather ruchings appear on muffs and bonnets, and on hats; and though on dressy occasions large hats are worn, for every day small close shapes almost covered with feathers find most favour; bonnets made of red plush are also in vogue. A hood and muff I have seen, united by a band of satin ribbon, were both made of velvet lined with satin. The ulster muff is of a rectangular shape, untrimmed, but drawn up at the top with a silk cord. Of course plush is used for muffs and bonnets, but I consider it is seen to the best advantage as a collarette —and anybody who, dreading cold, cannot wear low or open dresses, should contrive pretty capes of bright-coloured plush, trimmed liberally with lace. They are both fashionable and becoming. A very good pattern is semi-circular in form, just coming to the shoulders, the front having two large full ends of muslin and lace tied together on the chest. Plush is bright and lustrous itself, yet it appears to be always lined with bright colours, and all the new cloaks have gay linings. The newest circular cloak in lieu of fur has a quilted eider-down lining, and a hood lined with the same bright colour as the cloak; and on these are introduced some of the extraordinary antique silver ornaments so much affected in Paris, and also Russian enamel plaques in Byzantine style. Clasps of this kind are new and stylish. Silk sealskin is a very useful novelty. If you have any half-worn-out winter jacket, add a round cape, square pockets, and cuffs of it at once; or if you object to the weight of real fur, invest in a cloak or jacket made of it. It is warm, and looks handsome. Parisians have taken to it greatly, as they have to many other things in what they call English style—dark-coloured cloths of light make, with woven patterns, and tinted threads running through them, and generally a mixture of dark tones and bright colourings. French cashmere, Indian cashmere, and merino are all really useful wear, and all equally fashionable. Stockingnette has proved this winter a bad investment for manufacturers. It is produced on the knitting-loom, and it was hoped it would be the fashionable cloth; but it is proved that garments





made of it lose their good appearance quickly, and curl up at the edges. The worsted trade, however, is looking up—which reminds me, by-the-by, that Leeds is setting a good example to London. In connection with the Ladies' Council of Education, a class for cutting-out and dressmaking, specially intended for the benefit of governesses and ladies of limited means, has been started, as an opening is considered to exist for ladies as daily dressmakers, whose employment would be to attend families, and assist in renovating and re-modelling dresses, &c. There certainly is such a want, and it is most desirable that a practical knowledge of dressmaking should be diffused among the women of the lower and middle classes. Lady Bountifuls might be doing much good by starting such lessons in country villages.

For home dinner wear, thick white twilled cottons (trimmed with a colour), pale Pompadour cashmeres, twilled llamas, and flannels in greys, pale blues, and heliotrope are much worn. Many, however, are made costly by their rich trimmings. Feather ruches, handsome gimps, and sealskin fringe (which is really chenille), all these are used, costly though they be.

Tigers' claws, which have been received with favour as trimmings for hats, now appear on caps for evening wear, but they are not so repulsive as the vipers made of striped plush with metallic eyes, which Parisians are wearing for necklaces.

As at this season of the year evening dresses are in request, among our illustrations will be found a few suitable for quiet réunions, small dinners, &c. Let us turn to the group of three, consisting of a matron and two younger ladies. One of the latter (who is teaching her pet dog to beg) wears a dress of soft Surah silk and plaid satin. The Surah is dahlia-colour, and the plaid is crimson and dahlia. The under-skirt is kilted and edged with a double crimson balayeuse ; the tunic, opening with a point in front, is also edged with the same ; while the tablier, the bretelles, and the bands above the elbow are of plaid satin. The result is a seasonable yet smart-looking toilette, the crimson giving a touch of brightness to the *ensemble* very desirable at this time of year.

The seated figure wears a dress of soft creamy nun's veiling or barège ; skirt made with flounces and bouillonnés, a gathered bodice, and much creamy lace trimming ; gold bracelets, and gold-embroidered kid shoes. The looker-on is a youthful married woman in moonlight satin and plush, moonlight being the poetical name given to a pale shimmering shade of green. The front of the skirt is satin gathered in clusters ; the bodice and train are plush ; but, remember, plush should be worn with caution, as it thickens the figure, therefore only slightly-built women should adopt it for bodices or jackets, fashionable though it be.

There are two dresses sketched in outline, one for evening, the other for afternoon wear. The former is a stylish combination of lace, satin, velvet, and broché, showing several shades of heliotrope and violet ; velvet is used for the bodice, broché satin for tablier and train. The afternoon costume is myrtle-green velvet, with beaded passementerie, the beads showing many shades of green and heliotrope.

Two useful walking costumes are also illustrated. One of them is entirely of seal-cloth, a handsome material, all but undistinguishable from real seal-fur, perhaps more perishable, but infinitely lighter in weight ; it has also the advantage of being less costly. The cloak worn by the second figure is black brocade trimmed with dark fur, the hood also being fur-lined. Our initial letter gives a new fichu of lace and silky muslin, with a Christmas rose at the throat, for the partiality evinced for the wearing of natural flowers is as great as during the summer.



THE GATHERER.

Hot Ice.

In the *Midsummer Night's Dream*, Theseus, Duke of Athens, expresses his astonishment at Bottom's bill of the play, with its "very tragical mirth," by exclaiming, "Merry and tragical! Tedious and brief! That is hot ice, and wondrous strange snow. How shall we find the concord of this discord?" Now, Shakespeare notwithstanding, and paradoxical as it may appear, modern science has found the concord of hot ice. Recent experiments of Mr. Thomas Carnelly, of Sheffield, have led him to the conclusion that in order to convert a solid into a liquid it must be subjected to at least a certain pressure. Unless it experiences this pressure, or a greater one, no amount of heat will melt the solid, but it will simply sublime away in vapour without melting. Arrived at this conclusion, it followed that solid ice could be obtained at temperatures far above the ordinary melting point by simply reducing the atmospheric pressure around it below the tension of aqueous vapour at the freezing point of water (4·6 millimètres of mercury) ; and Mr. Carnelly has succeeded in obtaining blocks of ice at temperatures so high that it was impossible to touch them without burning one's fingers ! And on one occasion he actually froze a small quantity of water in a vessel so hot as to be intolerable to the touch.

New Electric Lamps.

An excellent electric lamp for domestic lighting has lately been brought to our notice. It is similar to Mr. Edison's, but forestalls the latter in date, and excels it in power and durability. As shown in Fig. 1, it consists of a glass bulb, A, containing a round loop, B, of specially prepared carbon, the two ends of which are electro-plated and soldered to two platinum wires, C D, passing through the lower part of the envelope. The carbon loops are as fine as a hair, and as elastic as a watch-spring or a steel wire, and are made by carefully heating them by degrees *in vacuo*, so as to shrink them and render them of a more dense and compact structure. The result is that they neither waste away when the electric current is sent through them, nor sublime into vapour and deposit on the globe, as Mr. Edison's carbon loops did. In order to prevent the outer air leaking into the bulb, the platinum wires, C D, are enclosed in glass tubes and sealed into the bulb, which is exhausted of air by a Sprengel air-pump, and the lamp is ready for use. The current passes up one platinum wire, traverses the carbon loop, which it heats to a white glow, then passes down the other wire.

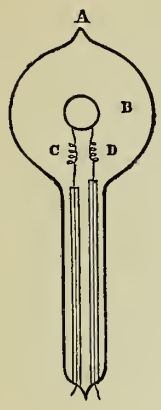


FIG. 1.

At a recent lecture in Newcastle the hall was beautifully lighted by twenty of these lamps, and the current feeding them was generated by a generator driven by a gas-engine consuming 120 cubic feet of gas per hour, whereas to light the room by gas the usual consumption was 200 cubic feet per hour. With a somewhat superior light the cost was, therefore, in favour of these (Mr. Swan's) lamps.

Another lamp, suitable for indoors, is that of Herr Werdermann, as modified by Mr. Joel. A pendant form of it is shown in Fig. 2, and consists of a brass tube, C, containing a slender rod of carbon, which rests with its point, A, on a round copper knob fixed within the lower glass shade, D. The current is put off and on in the same way as gas, by turning the cock, B. In its passage from the vertical carbon rod to the metal knob the electricity heats the fine point of the rod to a dazzling whiteness, and as the rod is thereby slowly burned away it gradually descends in the tube to feed the electric fire. One of these lamps will effectually light a room 16 feet long by 12 feet wide, and the light is mellow and steady.



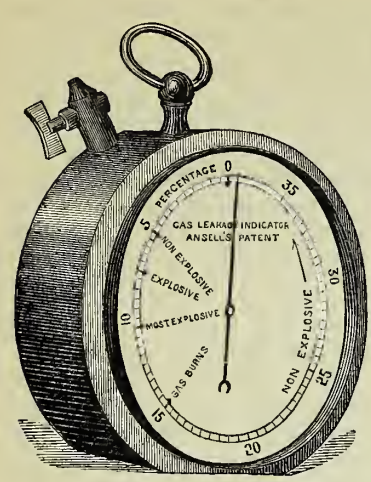
FIG. 2.

The Ventilation of Ships.

A few weeks ago a party of visitors assembled on board a yacht in the Victoria Docks, to inspect a new system of ventilation invented by Captain F. L. Norton, the American owner of the vessel, the *Ocean Pearl*. This system is already in use in the United States; it is self-acting, and advantage is taken of the pitching motion of the vessel to get rid of the foul air. The ventilating apparatus consists of two vertical tubes placed one on either side of the stern-post, connected into one tube at the top, but subsequently branching into two again, inside the vessel horizontally, which are the exhaust and discharge tubes respectively. The former is carried forward with a number of lateral branches to the cabins; the latter, the discharge, is a short tube and opens to the air. A check-valve is fitted into both tubes. The mode of working is as follows:—Supposing the ship to be raised at the stern by a wave, the water contained in the vertical tubes falls, and thus sucks the foul air in the branch tubes, &c., through the horizontal exhaust tube. Then the fall of the stern raises the water and discharges the foul air through the short length of tube, the discharge—the return being counteracted by the check-valve, so no air can enter the vertical tubes except from within. The fresh air, of course, enters from the deck; every forward roll or plunge of the ship sucks the vitiated air through the tubes, and the following downward after-dip drags the foul air out. In a calm, however, a mechanical arrangement is worked by hand, and is equally serviceable; and the discharged foul air is also used for sounding a fog-horn, when necessary. There is no reason, so far as we can see, why this very ingenious arrangement cannot be equally adapted for mines, or be otherwise made useful.

A New Fire-damp Indicator.

The disastrous explosions in coal-mines, that so frequently are accompanied with an awful loss of life, have not unnaturally excited the attention of inventors anxious to provide some means of lessening, if not of preventing, the dire results of these calamities. Many instruments have been devised with the object of detecting gas-leakages and escapes of sewer-gas, and of indicating the presence of fire-damp and choke-damp. The Ansell Gas-leakage Indicator, among the latest of these inventions, is a small portable apparatus for ascertaining the amount of gas in a mixture of gas and air, in order to determine whether or not it is of explosive character. This instrument is about the size of a carriage clock, and is furnished with a three-inch dial graduated at every half per cent. up to 35 per cent. At 5 per cent. the dial is marked "non-explosive," at 7½ per cent "explosive," at 10 per cent.



"most explosive," at 15 per cent. "gas burns;" while beyond this point a "non-explosive" mixture is indicated by the hand of the appliance. The hand is worked by a kind of aneroid barometer, which is acted upon through a slab of terra-cotta at the back of the mechanism. This porous substance being exposed to the mixture which it is desired to test, in one or two moments the hand on the dial will indicate the percentage of gas present in the compound. A tap at the top of the apparatus allows the contained gas to escape, and the hand to return to zero. The theory of the instrument depends upon the law of the diffusion of gases. From what has been said it is obvious that the Ansell Gas-leakage Indicator can be used in dwelling-houses as well as in mines and elsewhere.

New Fog-Horns.

An ingenious and powerful fog-horn blown by compressed air has been invented by Messrs. Sautier, Lemonnier, and Co., the eminent lighthouse engineers of Paris. The compressed air is furnished by an air-pump or compressor, which is kept constantly working while the fog lasts, and the sound is produced by a stream of the dense air impinging on a thin tongue of steel acting as a musical reed. The apparatus is arranged to give a succession of blasts at certain intervals while the fog lasts, and this is effected quite automatically. The same engineers have also constructed a small steam-siren for use on board ship and on locomotives instead of the ordinary steam-whistle. An interesting modification of the fog-horn was recently exhibited at the engineering exhibition in the Agricultural Hall at Islington by Captain Barker. It is designed for use at sea to enable ships to telegraph their course to one another during a fog. The horn stands on a metal table marked round with the various points of the compass and the corresponding sound-signals. By simply turning a handle these signals are sounded by the blast.

Photographing Nebulæ.

Photographs of the sun, moon, and stars have long been taken, but owing to the extreme feebleness of their light the nebulæ were never pictured in this way until Dr. Henry Draper, the famous discoverer of oxygen in the sun, recently succeeded in taking a portrait of the bright nebulæ in Orion's belt. He was enabled to do this by the new "dry" plates, which are extremely sensitive to light, and can because of their dryness be exposed to the light for a very much longer time than "wet" plates. As yet only the brighter nebulæ can be photographed, but when the method is refined the fainter ones will probably be imaged also. The large number of these tracts of glowing gas which can be counted in the midnight sky, and their varying characters, will open up a vast field for the observations of astronomers all over the world, and a comparison of their results will tend to throw fresh light upon the nature of these embryo worlds.

Paraffin as a Wood-Preserver.

A German chemist, Dr. Schal, has established the useful fact that wood impregnated with paraffin is protected against rot, especially when employed in alizarine manufactures, where it is exposed to the decaying action of damp acids and alkaline lyes. Wooden vessels, which unprepared become quite rotten in two months, will last for two years if treated with paraffin. The wood is cured by drying it in warm air for three weeks, then steeping it in melted paraffin, to which is added some petroleum, ether, or sulphuret of carbon. In preparing this bath, however, great care has to be exercised owing to the inflammability of its ingredients. To keep the paraffin in the pores of the wood the latter should be coated with oil varnish or soluble glass, washed after drying with hydrochloric acid, to form silicic acid to clog the pores. Paraffin melted with equal parts of linseed or rapeseed oil is also, according to Dr. Schal, useful for coating those iron vessels which in chemical manufactures are liable to rust.

Automatic Washing Machine.

A new mechanical washer for cleansing clothes without resorting to destructive friction is illustrated in the annexed woodcuts. The method of use is as follows:—The clothes are soaked over-night, then wrung out, and the soiled parts and seams are thoroughly soaped. The washer—of which Fig. 1 is a general view, and Fig. 2 a view of the bottom underneath—is put into an empty copper with a quantity of soda, depending on the number of clothes to be cleaned. The clothes are then placed in the empty copper, after being twisted slightly to exclude the air, and packed

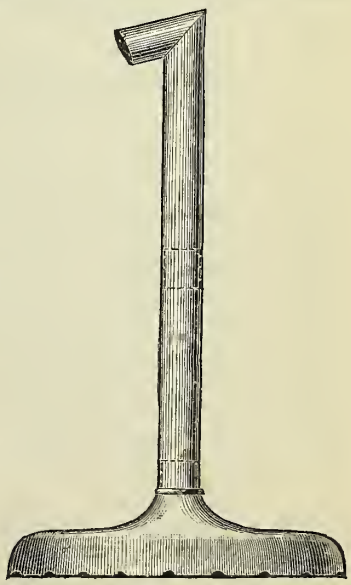


FIG. 1.

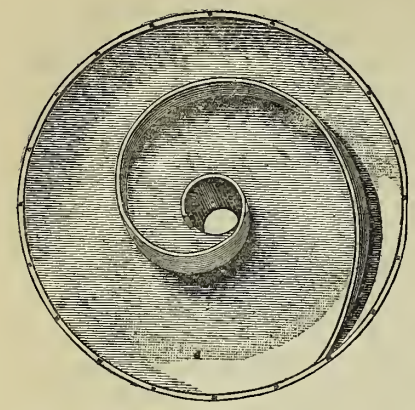


FIG. 2.

tightly to within two inches of the top of the upright tube or funnel of the washer. Soap is sliced amongst the clothes, and the copper is filled up with clean water till within two inches of the opening of the funnel. A good fire is then kindled, and when boiling sets in a current of steaming water will flow up the funnel and circulate through the clothes, thus cleansing them thoroughly in a gentle manner. The water, of course, enters by the holes round the base of the washer, and escapes by the horizontal mouthpiece at the top. From a quarter to half an hour is all that is necessary to scour the dirtiest clothes, which are afterwards to be rinsed in cold water, then blued, dried, and finished in the usual way.

Artificial Marble.

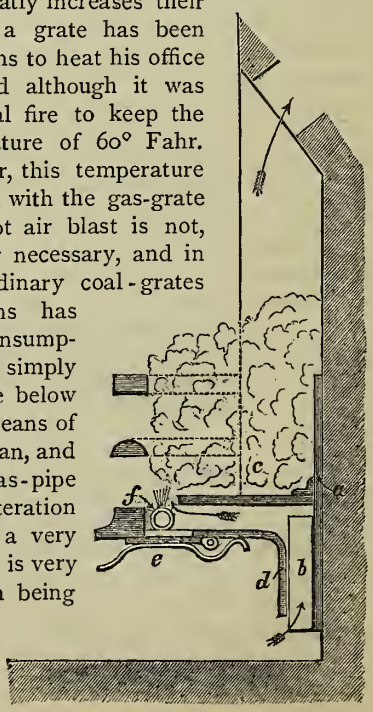
The manufacture of "bonsilate" or artificial marble has become quite an industry in Newark, New Jersey. It is said to be made from green ground bones as a basis, cemented in some way which is not made public. The material can be moulded in a plastic state into bars, sheets, or slabs, and turned, polished, or sawed into the desired shape. By the addition of colouring matters it can not only be made to imitate marbles, but coral, jet, and malachite. It is chiefly used for billiard balls, canes, dominoes, buttons, and such-like articles.

A Self-acting Fire Extinguisher.

The best time to put out a fire is, of course, at its beginning; and hence in America many of the large mills are provided with water-pipes running along the ceilings of the rooms, and fitted with outlet roses at certain points, so that an attendant by merely pulling a lever can let a stream of water pour down upon the works or goods below. The services of an attendant are even obviated by the use of an automatic arrangement actuated by a thermometer. When the temperature rises to a certain point the mercury of a thermometer makes contact with a wire and completes the circuit of an electric battery. The current thereby set up flows through an electro-magnet and attracts an iron armature, which in turn actuates a detent and releases a wheel, which opens or closes the stop-valve of the water-pipe by means of a lever, and allows the water to escape from the rose. The device is simple and therefore unlikely to get out of order.

A Cure for Smoke.

The increasing prevalence of dense fogs in London has recently called forth a number of suggestions for checking the evil, and Dr. C. W. Siemens has described a new gas-grate of his invention which seems to answer well in practice. These grates ought, in his opinion, to have no jets for the gas except those immediately behind the lowest front bar; the grid of bottom bars should be replaced by a solid plate, and gas-coke or anthracite ought to be used instead of incombustible pumice-stone to produce a radiating surface. Moreover, the gas should not be mixed in the pipe with air as is often done, producing a bluish flame, but should be burned in a pure state between the pieces of coke near the front of the grate. To carry out these ideas Dr. Siemens has constructed the grate shown in the figure. The iron plate, *c*, is riveted to a stout copper plate, *a*, facing the back of the fire-grate, and extending 5 inches above and below the point of junction. The plate, *c*, stops short about 1 inch behind the lowest bar of the grate in order to make room for a half-inch gas-pipe, *f*, which is perforated with a zig-zag line of holes for the escape of gas along its upper surface. This pipe rests upon a lower plate, *d*, which is bent downwards towards the back, so as to provide a passage 1 inch wide between the two plates. A trap-door, *e*, upheld by a spring is provided for the discharge of ashes falling into the channel. The vertical part of the passage is traversed by a strip of sheet copper, *b*, about 4 inches deep, bent in and out like a lady's frill, and riveted to the copper back-piece—copper being an excellent conductor of heat—and this piece, being at least three-fourths of an inch thick, carries the heat from the back of the grate to the frill-piece. An air-current is thereby set up which, traversing the horizontal flue, impinges on the gas-flames, and greatly increases their brilliancy. Such a grate has been used by Dr. Siemens to heat his office for some time, and although it was difficult with a coal fire to keep the room at a temperature of 60° Fahr. during cold weather, this temperature is easily maintained with the gas-grate described. The hot air blast is not, however, absolutely necessary, and in several of the ordinary coal-grates which Dr. Siemens has altered for the consumption of gas, he has simply closed up the space below the lowest bar by means of a close-fitting ash-pan, and introduced the gas-pipe behind. This alteration can be effected at a very trifling expense, and is very cleanly, the ash-pan being withdrawn only at intervals of several days for emptying; but the appearance



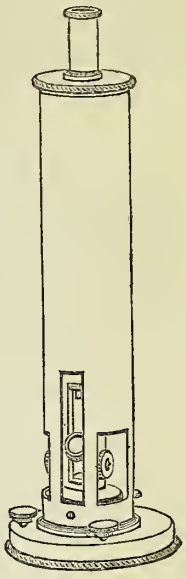
of the fire is in this case far less brilliant than when the hot air draught is added. As regards the relative costs of the coal and gas fires, Dr. Siemens finds that during nine hours' use he burns sixty-two cubic feet of gas, and 22 lbs. of coke, which at the average London prices amounts to 0·524*d.* per hour. As a coal-grate it formerly burned two and a half large scuttles a day, reckoned at 19 lbs. each, which, at 23*s.* a ton, makes a rate of 0·633*d.* per hour.

A Moving Railway Station.

From the locomotive engine we are apparently getting to the "locomotive station," as a very curious arrangement for obviating the frequent stoppages of trains may be called. This ingenious invention of Mr. Hanrez consists of a "waiting-carriage" comprising an engine with special gear. The carriage is placed on the siding, and in it the intending passengers take their places and their luggage, instead of waiting on the platform. When the train arrives it does not stop, but the waiting-carriage is picked up. This feat is accomplished as follows:—The train is provided with a hook on its last carriage, which catches a ring supported on a post and connected with a cable, which is wound upon a drum in the waiting-carriage. When the hook catches upon the ring, the cable commences to unwind from the drum. This movement compresses a system of springs, and the carriage is pulled gradually away, the speed by degrees increasing, while all jerking is obviated by the springs aforesaid. The cable which has been let out is now re-wound by the engine attached to (being part of) the carriage, and the carriage is then coupled to the moving train. When the carriages—made on the American principle—are united the passengers are transferred to the "main" train with their luggage, the waiting-carriage is disconnected, and its engine takes it back to the station again whence it started. The plan is ingenious, but we doubt whether upon our crowded railways it will be found altogether convenient.

The Chronodeik.

Watchmakers at home, and surveyors or explorers in new countries, often get the true time by equal altitudes of the sun taken by the help of a sextant and an artificial horizon, or a watchmaker's transit instrument; but a very simple and portable instrument for the purpose, termed the "Chronodeik," has been invented by Mr. S. C. Chandler, junr., of Boston. It consists essentially of a swinging bar pivoted at its upper end, and free to take up a truly vertical position. This bar carries a small telescope which it also keeps vertical, the object-glass being below and the eye-lens above. A small mirror is also attached to the bar beneath the object-glass, and it can be clamped in a definite position by a milled-headed screw. The mirror and clamp are shown in the accompanying woodcut, which represents a general view of the chronodeik. It is fitted with levelling-screws at the bottom, and a dark glass is provided with the eye-lens. In using the instrument to find the time, the mirror is adjusted till it reflects an image of the sun straight up the tube of the telescope, so that the eye looking down the telescope sees the solar disc bisected by a horizontal hair placed in the axis of the telescope. Of course when, without moving the instrument meanwhile, the image of the sun is in this position before and after noon, the true time of solar transit across the meridian, or 12 o'clock, can be observed. The instrument is only 9 inches long by 2 inches in diameter, and it gives the time-piece error within a second.



An Electric Hammer.

Last winter Dr. C. W. Siemens exhibited an electric furnace in which cold steel was rapidly fused by the heat of the voltaic arc. This contrivance has been paralleled by his brother, Dr. Werner Siemens, of Berlin, who has produced a hammer driven by electricity. This implement consists of three hollow coils of insulated wire, having a movable core or rod of soft iron, free to move up and down under the axial attraction of the coils when a current of electricity circulates in them. The central coil is traversed by a constant current which magnetises the rod or hammer, and the two extreme coils are traversed by alternating currents from a dynamo-electric generator in such a manner that they alternately attract and repel the magnetic rod up and down, so as to make it beat like a hammer. The range of the blow is limited on one side by a spiral spring placed within an elastic cushion. Of course a very great rapidity of action can be given to the hammer, and the arrangement is also applicable to the working of a rock-drill.

Ericsson's Torpedo.

Accounts come to us from America of a terrible engine of destruction against which no existing iron-clad can stand. Captain John Ericsson, the famous engineer, has, it appears, designed a new torpedo or submarine projectile, which is fired from a gun on board the torpedo boat and enters the water at the extraordinary speed of 160 miles an hour, but of course this rate cannot be kept up long in a resisting medium like water. It is shaped like a cigar or rifle cartridge, and the head is charged with 250 lbs. of dynamite. When it strikes the ship against which it is launched the dynamite of course explodes, and scatters devastation far and wide. The terrible power of the new weapon is mainly due to the substitution by the inventor of gunpowder for propelling the

torpedo instead of clockwork or compressed air. The weapon is, in fact, a subaqueous shell and mortar, and judging from recent trials at Sandy Hook, New York, its powers of naval destruction are enormous.

A Geyser in a Coffee-cup.

A geyser in a coffee-cup savours a little of the metaphorical storm in a tea-cup; nevertheless a correspondent from New Zealand, Mr. J. L. Sinclair, of Auckland, sends us an account of a pretty experiment which he has made illustrative of geyser action, and with no other apparatus than a coffee-cup about 3 inches high by $3\frac{3}{4}$ inches wide, and having a fissure in the glaze running horizontally round the interior for about $\frac{1}{4}$ inch and situated about $2\frac{1}{2}$ inches below the lip of the cup. On filling this cup with boiling water an eruption took place, and drops of water were projected several inches into the air. Until the fissure was completely covered no disturbance of the water took place, but when the cup was full the pressure of steam in the crack doubtless caused the ebullition.

Fog Spectres.

During one of the last October fogs a resident in Putney observed a curious imitation of the famous spectre of the Brocken in his own back garden. Having occasion to go there about half-past ten one night during a thick white fog, through which, however, a star could here and there be seen, he found a gigantic shadow of himself projected on the fog by the lighted candle which he carried in his hand. The shadow was about 12 feet high, and very oddly distorted like the Brocken spectre. The great Faraday was wont to amuse himself by producing the same phenomenon in his own home by means of dense vapours.

Prize Double Acrostics.

III.

Two fields of war, and blood, and strife,
Where men sought for each other's life,
Groaned forth with many a dying sound
From England's corpse-encumbered ground:
The one where foreign spear and mail
Bore back the storm of arrow-hail:
The other where but English fought,
And brother life of brother sought.
The following words will give a clue
By which they may be known to you:—
A spot beloved of every race,
A word my pen doth often trace;
A strain of music set for me,
A plant whose strength surpriseth thee;
A measure that with ease is spanned,
A lake in Afric's sunny land;
A sea-bird on the wavelet's tip,
A part conspicuous of a ship.
Their foremost letters and their last
Will show where blew each battle-blast.

IV.

I slept; and, as I slept, I dreamed;
And lo, before my sight there seemed
A city beautiful and fair,
Methought it was beyond compare;
And sure it was the noblest planned
Of all within that foreign land!
And then it disappeared again,
And in its place a part of Spain
Was viewed, and then a town of Kent
Before again the dream was spent.
And then there came before my view
The memory of a debt long due,
Which had been paid in such a way
That left the money still to pay.
I was pursued; I took my flight
To where there stood a battled height.
Within the walls a convent stood,
With many a form in monkish hood,
And many a warrior bold and brave
In accents stern the welcome gave.
But ere I scarce the place could know
It vanished to the vale below;
And there the city, church, and all,
Rose with a spire so wondrous tall,
I scarce could think the former scene
Was that where once the place had been!
I slept no more; but to my mind
The vision still was left behind.
But in such vague, confused array,
Each place seemed still to point the way
Where first and last I was, it seemed,
When I lay down, and slept, and dreamed.

The first, the foremost letters tell;
The last, the finals show as well.

(*To be concluded.*)

Song Competition Prize Announcement.

One hundred and eighty-four compositions have been sent to us in competition for the Prize of Five Pounds offered in April last, for the best musical setting of Wordsworth's "Lucy." The examination of so large a number of settings occupied no little time, but our greatest difficulty consisted in deciding between the three highest. These three had each a recommendation peculiar to itself. On the whole, we feel justified in awarding the Prize to MR. HENRY HOUSELEY, 18, *Newstead Grove, Nottingham. We cannot, however, speak too highly of the musicianly character of* MR. EATON FANING'S *setting; or of the poetic appreciation of the words evinced by* MISS KATE FUSSELLE, *whose competition, if it had received more finish in technical detail, would certainly have obtained the prize on the score of suitability. The Editor would also very highly commend the settings, all fairly equal in point of merit, of the following composers:—* MESSRS. MYLES BIRKET FOSTER (*London*), WALTER BATTISON HAYNES (*Leipsic*), *and* G. HERMANN LOTT (*London*).

The Editor begs to remind his readers that, in accordance with the published rules, he does not undertake to return the MSS. of competitors.

It is hoped that the successful song will be published in the next part of the Magazine.

Art-Needlework Competition.

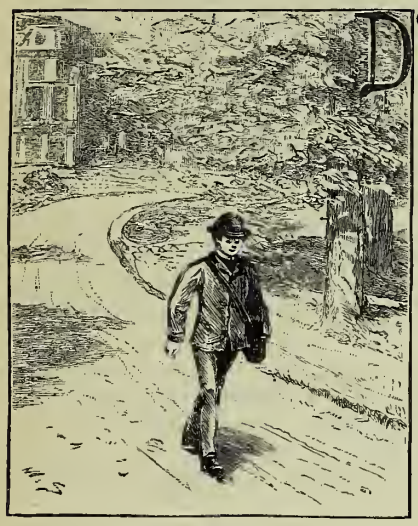
The last day for receiving work under this section is February 1st, 1881.

THE PROBATION OF DOROTHY TRAVERS.

By the Author of "In a Minor Key."

CHAPTER THE EIGHTH.

SIR AUGUSTUS'S STUDY.



"DOROTHY, I wish to speak to you in my study."

Sir Augustus, looking, if possible, stiffer and more formal than usual, thus accosts poor, trembling little Dolly the following morning, as she is leaving the breakfast-room.

She knows perfectly well what is about to happen. In her pocket lies a letter, received that morning from Harry; a wretched, disconsolate letter, telling her how his father will not hear of their engagement, how he pooh-poohs the whole affair as childish and silly, stinging his good-natured son almost to madness by the contempt he so unstintingly pours on him and his attainments, and finally absolutely forbidding any communication or engagement whatever between him and Dolly. The letter concludes with ardent expressions of the writer's affection, saying he shall always consider himself as bound to her, if they should not come together for twenty years. Many of the words are ill-spelt, the composition is bad, almost childish, but there is no mistaking the passionate love and devotion that breathes through every syllable. Dolly has cried over it and kissed it many times since eight o'clock this morning, and vowed to herself that she too will be true to Harry, come what may. And now she is to confront her father.

So she follows him into his study, which is a counterpart of himself, cold, dull, and formal, and stands like a prisoner at the bar, with downcast eyes, studying the pattern of the carpet, whilst Sir Augustus draws a letter from his pocket, and proceeds to immerse himself in its contents.

Apparently they are most complicated, judging by the way the businesslike-looking sheet of blue paper is read and re-read, before he can make up his mind to put an end to Dolly's agonising suspense.

At length, after what seems to her hours, but is in reality minutes, he clears his throat, and pompously commences—

"I have this morning received a most extraordinary letter from a certain Mr. Leonard, Dorothy, telling me that his son has had—a—the presumption to ask you to be his wife. He further goes on to give me every detail of himself and his family, from which I gather that"—with an ironical smile—"they hardly belong to the *crême de la crême*, and finishes up with the still greater impertinence that nothing will induce him to allow the marriage, as his son is young and foolish, and you are only a child. How is it that I was never told of all this? and how, again, is it that Mr. Bruce ever permitted such a thing as your engagement with a young man?"

"I meant to tell you to-day, papa, when I heard from—Harry."

"Mr. Leonard, if you please."

"We could not help being intimate," she continues, with a longing, wistful look in her soft eyes. "We lived so near each other, and we were always together as children, ever since I can remember. Indeed, Uncle Tom is not to blame."

She has drawn nearer to her father as she speaks, and her face has assumed a pleading, beseeching expression, which is utterly lost upon Sir Augustus.

"If Mr. Bruce is not to blame," he says icily, "I presume you are, as the fault must lie somewhere. However, be that as it may, I must let that pass, and revert to the present. To begin with, allow me to inform you that even if Mr. Leonard senior were to do me the immense honour to permit his son to propose to me for your hand, with all the necessary formalities, I should never countenance the marriage. The idea—the preposterous idea—of such a thing! The young man must have been mad!"

And with these words Sir Augustus raises his dull eyes to his daughter's face, and looks at her critically as though to read her thoughts.

The pretty, bright face looks troubled enough now. The brown velvety eyes are ready to fill with tears, the sweet, red-lipped mouth droops pathetically at the corners, but the contemplation of her fresh young beauty fails to move Sir Augustus. On the contrary, his heart hardens, as he rapidly considers the danger of these charms, whilst he waits, with a patience worthy of a better cause, for an answer which will allow him to pass a certain noose he holds in readiness dexterously round her neck.

"Never allow the marriage, papa?" she asks at length, when she has recovered her surprise. "Not even when we are older? We can wait a long time, you know," with a swift, coaxing little smile.

"Not if you waited till you were both grey-headed," he answers forcibly.

"Will you tell me why not?" she asks again, but timidly enough this time.

"Why not?" he asks, rising in all his majesty, to commence one of what Ferdie calls his orations. "Is

it possible, Dorothy, that you should think that with this letter before me"—pointing to Mr. Leonard's epistle—"I should ever sanction an engagement with the writer's son? Or again, even supposing that this letter had never been written, do you imagine—extraordinarily ignorant as you are of what is due to yourself—that I should ever permit a daughter of mine to marry a man of apparently the lowest origin? The young man must have lost his senses when he proposed to you, and you must have lost all feeling of self-respect when you accepted that proposal."

"But, papa——"

"No more, Dorothy, I have made up my mind."

"But, papa, Harry is——"

"Once for all, I cannot allow you to continue the subject, so let me hear no more of Mr. Leonard. I write by this morning's post to inform his father how entirely I agree with his views, and with that I trust there will be a termination of this most ridiculous affair."

"May I not write to Har——to Mr. Leonard?"

"If you bring me the letter to read. But, mind, it must be the very last communication you hold with him."

"Better that than nothing," thinks Dolly, for the time being almost crushed by her father's utter pitilessness. "Papa," she adds aloud, "please do not read all I write. I want to tell you something. Harry says he will be true to me, if we have to wait twenty years. May I not say the same to him?"

Something like a smile illumines Sir Augustus's countenance as he prepares to answer this question, put to him in such perfect simplicity and good faith. It is the question he has been waiting for all through the interview, and which is to bring forth from the recesses of his memory that noose so dexterously knotted for him this morning by his wife.

"Well, yes," he answers slowly and deliberately, as though making an immense concession; "you may say that if you choose, for although neither Mr. Leonard nor I ever intend to allow the marriage, still it may amuse you both to vow eternal constancy. If you therefore restrict yourself to renouncing Mr. Leonard, at the same time assuring him of your devoted constancy, and your firm intention of marrying no one else—which I fancy is the kind of thing disconsolate young ladies say on these occasions—I will kindly waive reading the letter. But before you leave this room, you must promise me that it is the last you ever write to Mr. Leonard."

"Yes, I promise," says poor little Dolly, with tears in her eyes and her voice; and, strange to say, little as he knows of her, Sir Augustus feels no misgivings as to the faithful keeping of this promise.

"Dorothy," he says once more, as he rises to his feet preparatory to terminating the interview, "there is yet one thing I must exact, and that is that you breathe no syllable of your so-called engagement to a single creature in or out of this house. I would not have Rose or Louisa know of it for the world; they would be quite horrified to hear of such extraordinary proceedings as you and Mr. Leonard seem to have indulged in at Holme Regis. Therefore you must give me your word that you never mention the subject to any one but myself."

Dolly gives the desired promise, and is at last dismissed from the room by a majestic wave of her father's hand. As she steps out into the hall, she meets Lady Travers.

"Is papa in his room, dear?" she asks; and on Dolly responding in the affirmative, she opens the door and enters.

"It has arranged itself most admirably, my dear," says Sir Augustus, advancing to meet his wife. "Just as you foresaw. You are a wonderful woman, Lisa."

"She has promised to be true to the young man for any length of time—is that it?"

"Yes, and she sends off the letter to him to that effect this morning. She has thus, by her own voluntary act, placed a clog round her neck, which will, at any rate for many years to come, prevent her marrying any one else. We could ill spare——"

"Hush, dear!" answers Lisa. "You do not sanction the marriage, that is sufficient. Give me the old man's letter to read again. How splendidly he has played into——I mean, how well he has behaved in the matter. Those sort of people have often an immense deal of pride."

Meanwhile, Dolly sits up-stairs in her room, trying to compose a letter to Harry. It is a lengthy business, for her poor little heart is full; and the preliminaries consist of a good cry, the re-reading of both Uncle Tom's and Harry's letters, and the spoiling of half a dozen sheets of paper, in the attempt to frame an epistle which is to say neither too much nor too little, but which is to convey to Harry her unalterable love and devotion, come what may.

A crushing sense of desolation, and a wild yearning for Holme Regis, and Uncle Tom's loving protection, are the two sensations of which she feels the most conscious as her pen travels over the paper, and she mentally rehearses her interview with her father, thinking of all the potent arguments she left unsaid, all the eloquent entreaties she failed to make use of. A knock at the door, and a message that the morning's post-bag is just going, brings her letter to a hasty but fervent conclusion. So she hands the momentous epistle to the servant who is waiting for it, and watches him as he walks down the drive till her eyes are blurred with tears, and she can no longer discern the brown leather bag which contains her own written assurance "that she may not marry Harry, but at the same time she will be true until death to him."

With a slow, heavy step she turns from the window to commence in earnest her new home-life—bound to a man she may not marry.

Lady Travers is unusually serene that day, and especially gracious to Dolly, when she finds her seated in the schoolroom with Rose and Lou reading Racine's "Athalie," whilst Ferdie tranquilly knits his little brows in the corner over his sums, and Augustus, seated on the floor, cons Latin verbs. The room, too, looks more comfortable than usual; the ink-spots

are less perceptible, and there are several bouquets of flowers on the tables and mantelpiece.

So Lady Travers advances to Dolly, kisses her fervently on the forehead, and squeezes her hand; and Dolly looks gratefully in her face, and feels that here, at any rate, she has one friend.

Truth to say, she is not paying any attention to Racine's long, and just now inexpressibly wearisome, phrases and polished diction, for her thoughts are with Harry, and when not with him are rehearsing the scene with her father over and over again, sometimes oddly enough wandering off in the direction of the Lodge and her interview with Lady Travers yesterday, which was disappointingly tame and unexciting, and that pleasant walk home in the gloaming with Joan and Mr. Ingram. The result is that Racine is more or less mangled, as Rose and Lou drone out their parts in a dull, unvarying monotone, and Dolly strikes in feebly from time to time, but always in the wrong place.

The sound of wheels rouses them all three, and they look out of window to see Lady Travers get into her pony-carriage, and drive swiftly down the drive out of sight, whereupon Rose, awakened to life, shuts up the book with a bang, and shouts—

"Hurrah! we shall have lunch to ourselves now. How we will plague Dolly!"

It is quite true. No one appears at luncheon, and Dolly presides over that meal, and finds that Rose and Lou with their mother and without her are very different girls. They patronisingly promise, however, to take her round the village this afternoon, show her the church, and introduce her to the rector's wife, who is quite devoted to Ferdie. Dolly acquiesces gladly. She feels so wretched that she longs to go somewhere to find relief from her own thoughts, besides which she would much like to make Mrs. Graham's acquaintance.

So with a long, long letter to Uncle Tom, written as bravely as she can under the circumstances, but which nevertheless makes Aunt Mary cry, and Mr. Bruce use rather warmer language with respect to Sir Augustus than is perhaps justifiable in a clergyman, she sallies forth to the village with the children. Through the plantation at the back of the house there runs a winding path which leads straight to the Rectory and church, the tall, graceful spire of which they can see gleaming amidst the trees as they thread their way through the brushwood; and Ferdie chatters incessantly, relating to Dolly all the quaint legends and fairy tales of German lore which appeal so vividly to his imagination. Dolly lets him talk, thankful that he does not require an answer, for she could ill have borne an examination in Grimm or Hans Andersen just now. And so absorbed is she in her own unpleasant reflections, that she does not notice when he suddenly breaks off and raises his head to listen.

"I hear some one," he exclaims—"no, two people; they are talking together. I wonder who they are?" and Ferdie, who is the most inveterate little gossip, bids the boy who is drawing his chair stop whilst he listens.

"Some of the men about the place, I dare say," answers Dolly absently. "Let us go on, Ferdie dear, and you finish your story."

"Well, the poor little girl was cleverer than her wicked step-mother, and she married the prince after all, and they lived very happily ever afterwards. Is not that the end, Lou?"

"I really do not know; I cannot remember all those silly stories. Why, here is Anne!" as two paths converge, and Anne emerges from the one, as they do from the other.

"Ah! Anne, it was you I heard talking," says Ferdie. "Who were you conversing with?" and he looks at her maliciously with his bright, restless eyes, for he and Anne are old enemies. But his cousin does not condescend to answer him.

"How d'ye do, Dolly?" she says. "So you did not come to the lunch; it was very pleasant. I am on my way home now, whilst Joan has gone as usual to worry that poor, aggrieved woman, Mrs. Graham, about some petty parish detail."

"The lunch," answers Dolly, "what lunch?"

"With the guns, my dear, of course."

"Oh! I knew nothing about it. I have been with the children, and we are now on our way to the Rectory."

"Who were you talking to, Anne?" interrupts Ferdie again, in a grave, inquisitorial voice. "Shall I guess?"

"I wish, Dolly," says his cousin, "that you would take this child in hand. If I had anything to do with him, I should faithfully follow King Solomon's advice, and punish him every day of his life."

"Oh, you coward! And I can't walk; for shame! I know who you were talking to—the fascinating baron. Ha, ha, ha!"

"Do be quiet, Ferdie, you are extremely rude," says Dolly, pretending not to see Anne's heightened colour, and the spiteful look that comes into her eyes, as she calmly asserts that she was conversing with the Wrangham gardener about some cuttings, after which she bids a hasty adieu, and beats a retreat.

"She was talking to the baron, I know she was, and why should she not say so?" persists Ferdie, whereupon Dolly reads him a protracted lecture on his rudeness and pertness to his elders, and he relapses into sulkiness until they reach the Rectory.

Mrs. Graham receives them with enthusiasm. She is a small, good-tempered, bustling woman, with a certain amount of energy of her own, which occasionally causes her to run counter to Joan, although she knows perfectly well that she must eventually succumb to the latter's strong, imperious will.

Just now Joan is seated in the drawing-room, with a pile of account books by her side, and rows of names in front of her. She looks grave and busy, and gives Dolly and the children only a little nod of recognition, returning at once to the absorbing task before her, while Mrs. Graham orders plum-cake, and produces some barley-sugar for Ferdie, which causes his cousin to murmur, "Nasty, sticky stuff!" between her figures.

"So I hear, my dear Miss Travers, that you are going to be very good, and help me in the parish and with the Sunday-school," commences Mrs. Graham to Dolly; "it is very kind of you; but Lady Travers tells me you are accustomed to the work, as you have been living with a clergyman and his wife."

"Yes, I have," responds Dolly, "and I shall be very glad to do anything I can."

"Six and eight are fourteen, and—She can take the organ," laconically puts in Joan, and relapses again into figures.

"I used to play it at home," answers Dolly, with radiant face, and Mrs. Graham seizes her hands with delight.

"That is an immense comfort; that simplifies matters wonderfully, does it not, Joan?"

"Mrs. Graham," says Ferdie, with his mouth full of barley-sugar, "you must not put upon Dolly, she is a dear little girl. Don't you think her awfully pretty?"

"Oh! Ferdie, you little goose, do not talk such nonsense," says poor, blushing Dolly, as Mrs. Graham responds heartily—

"Indeed I do; and I will not put upon her at all, that I promise you."

"Ferdie, be quiet," says Joan sharply, shutting up her copy-books with a decided bang of relief. "Now for business. Mrs. Graham, I am at your orders."

This means that Joan intends to settle what Dolly is to do or not to do in the parish, and after a slight attempt at resistance Mrs. Graham gives in, whilst Joan produces pencil and paper, and rapidly sketches a plan of the duties to devolve on her cousin.

Thus drawn up, they look rather formidable, and Dolly, with visions of the carrying on of her education that Aunt Mary has so frequently impressed on her, mildly suggests that at present she has to be a good deal in the schoolroom. Joan, who thinks nothing of rising before six every morning, shrugs her shoulders and murmurs something about "lazy people," whereupon Ferdie springs to the rescue, declaring with his usual plain-speaking that Dolly shall not be bullied: Mrs. Graham supports him, and Joan, sorely against her will, is vanquished, but she does not like it.

Tea and fruit for Ferdie put an amicable end to the discussion, and, by the time they are ready to take their leave, Joan has so far recovered her serenity as to propose to walk a part of the way home with her cousins, as their road is the same for a short distance. Just as they emerge from the Rectory, they meet Mr. Ingram.

"I have been sent in quest of you young people," he says gravely. "I am afraid, Miss Travers"—to Dolly—"that you have been leading them into mischief."

Dolly smiles for the first time this afternoon.

"On the contrary, they have been my leaders."

"Why were you not at the lunch to-day?" he asks. "I had prepared a complete catalogue of questions in natural history to ask you."

"I did not know anything about it," answers Dolly, not perceiving that Joan has never spoken, and is walking moody and silent with her particular aversion, Rose. "I had my lunch at home."

"You must come next time. It is very pleasant on a beautiful day like this."

"I should like it immensely, but, you know"—confidentially—"I don't think I am quite come out yet."

Mr. Ingram bursts out laughing, at the same time begging Dolly's pardon for so doing.

"What constitutes coming out?" he asks—"eating luncheon in a field? If so, Rose and Lou must be very much come out, for to my certain knowledge I have lunched with them three times *al fresco* this autumn."

"Good-bye, Dolly," says Joan abruptly, as their paths diverge, and she nods to the rest of the party.

"You will let me see you home, Miss Travers?" says Mr. Ingram, for the first time becoming aware that Joan is not quite herself.

"Really, it is not in the least necessary," almost rudely. "I walk about at all hours by myself," and before he can make any answer she rapidly turns the corner towards the lodge.

Mr. Ingram smiles serenely, quite content to act as escort to the children division. By the time they reach home, Dolly has almost forgotten to be miserable, and actually runs up-stairs two steps at a time.

"I think you are wanted down-stairs in the library," says Mr. Ingram, speaking at a venture, as he parts from her in the hall. "It seems that Lady Travers and the count have been hatching some theatrical plot between them, and the discussion was in full swing at luncheon-time."

When, however, ten minutes later Dolly puts in an appearance in the library, she finds a solemn silence reigning, and receives a playful reprimand from Lady Travers for having stayed out so late, accompanied by a whispered request that she would just see after the children. She complies of course, and is conveniently imprisoned in the schoolroom until the dressing-bell rings. But to-night no Mr. Ingram appears.

CHAPTER THE NINTH.

IN THE PLANTATION.

DOLLY has been at home a whole month—to her it seems years—and has taken her place in the family, guided thereto by Lady Travers' invisible hand.

That place is the schoolroom, and if her step-mother's hand had been of iron, instead of the softest and whitest in the world, it could not more effectually have settled Dolly into the niche intended for her. The clever, scheming woman has fully taken in, from the first, that her step-daughter's warm, affectionate nature may be turned to excellent account, and that Ferdie must be the medium through whom the desirable result is to be brought about.

The child simply worships his new sister, whom he alternately tyrannises over or caresses, and Dolly returns his love with interest. The long looked-for and expected governess has never arrived; she is apparently quite unattainable, but "dear little Dolly," as Lady Travers fondly calls her, almost supplies her place.

During this month her duties have quietly accumulated, she herself knows not how, until at the present moment her whole day is spent with the children. She likes her work, is fond of her step-mother and brothers and sisters, and the constant and engrossing occupation is perhaps the best thing for her under her little chance of it. Harry's name is never mentioned; no word from him ever reaches her; for Sir Augustus has at once and sternly interdicted any correspondence with his daughter, on pain of the letters being either opened, or altogether suppressed.

In this dearth of news and sympathy, the frequent



"THE STORIES TOLD BY THE FIRELIGHT ARE A MOST AGREEABLE CHANGE" (*p.* 134).

present circumstances. She has literally hardly a minute to herself, all her leisure time being devoted to taking Ferdie's portrait in chalk—a process which affords unbounded satisfaction to that vainest of little boys—and in writing long letters to Holme Regis, and consequently she is fairly happy.

She is young and hopeful, and it seems to her that, if only she and Harry agree to wait patiently, their respective parents must come round in time. She has need of all her courage, for at present there seems

budget from her old home becomes doubly precious, but even Uncle Tom—at Sir Augustus' express wish—rarely mentions Harry's name, and gives but scant information as to his movements.

There has been much coming and going at Wrangham during these weeks. Sir Augustus and Lady Travers have been away for two or three days at a time, staying with friends for shooting, Mr. Ingram has been backwards and forwards, and the count and the baron return to-day for the tableaux that have

been the subject of so much talk, after three weeks' absence.

Dolly and Mr. Ingram have become the firmest friends over poor little Ferdie's couch. The schoolroom tea has been often enlivened by his presence, Rose and Lou called to account for insubordination to their youthful governess, and Ferdie's outbreaks of passion suppressed with a firm hand. Dolly is hardly aware how much she enjoys these evenings, and occasionally wonders at her own hilarity, remembering that not so very long ago she said to herself, that if she were separated from Harry she could never be happy again.

She knows that Mr. Ingram is exceedingly pleasant and amusing, that his friendly criticisms on Ferdie's picture, the half-hour's music after tea, the stories told by the firelight are a most agreeable change after French and Latin verbs; but she has no idea that he is accustomed to be made much of, and highly thought of, in the various towns he has passed through in the course of his diplomatic career. Had she been less ignorant, she might have wondered that a man of his age and talents should find the smallest pleasure in sitting in a rather comfortless schoolroom with a number of children. But she does not reflect on the matter at all, except to remember that they are all delighted when he does come, and that his appearance is a signal for the limited hospitality at her command, in the shape of extra good tea, and hot, buttered toast.

Perhaps it is this perfect simplicity that attracts Geoffrey Ingram. He has had plenty of flattery and praise from women of all ages and all ranks, since the days that Lady Travers used to take him about with her, and call him "her handsome boy," until now, that he is heartily tired of it all. To receive a warm, outspoken welcome, such as Dolly accords him, not because he is good-looking, or the fashion, or is seen at the best houses—accompanied by no downcast eyes, or self-conscious looks—is almost a novelty, and just now he seems to find it a very pleasant one. His good heart, which makes him so kind to Ferdie, so paternally interested in Rose and Lou, has in a great measure prevented his being spoilt, and has called forth his sympathy for Dolly, independently of the attraction of her sweet, liquid brown eyes, her fair fresh beauty, and the charm of her unsophisticated ways and manners.

The schoolroom, too, is no longer the dreary spot it once was. Dolly's portfolio of sketches has been ransacked, its contents mounted on cardboard adorned with bright borders, and the walls ornamented with them, to Ferdie's wild delight. Lady Travers has no objection to Mr. Ingram's visits to the schoolroom. She has made up her mind that he will marry either Joan or a certain lovely German countess at Berlin, and is, therefore, harmless; and in her own personal favour he has been deposed long since.

So it comes to pass that on this frosty, crisp November afternoon, when Dolly is walking home from her organ practice, her thoughts are far away from Holme Regis, and are dwelling unpleasantly on the fact that Joan's manner to her has strangely altered of late. At the Dowager Lady Travers' request, she has paid frequent visits to the Lodge, and is always received with kindness by the poor invalid, with whom she is an immense favourite. But with Joan it is otherwise. Her former warm, brusque manner has given way to one of studied reserve, her love of interference occasionally breaking bounds, but only to be checked at once. It puzzles Dolly, and she has just resolved she will ask her cousin how she has offended her, when she is startled by hearing a footstep behind her, and, looking round to see who it is—for it is getting dark, and the plantation is lonely—recognises, with a thrill of delight, a well-known face and figure emerging from among the trees.

"Oh, Harry! my dear, dear Harry!" and the two little hands are thrust out in eager welcome—"how did you come here?" And there is as much crying as laughing in the voice, for she does not know herself how much she has yearned for Holme Regis and all its belongings during this long, long month.

But she does not blush as she welcomes him as though he were her very dear brother, the look of eager joy is that of a sister, the bright smile has no tinge of shyness in it. But with Harry it is very different. There is nothing brotherly about him. No brother ever looked at a sister as though his life hung on her lips, as though his whole future lay mirrored in her eyes.

"My darling! my own sweet Dolly! oh, how I have hungered for your face!" he ejaculates, still looking at her with that devouring gaze, which somehow sends a thrill of pain to her heart, pleasant and delightful as it is to be worshipped once more, and makes her give a little nervous laugh.

"You look pale, my sweet," and Harry glances cautiously around him, and seeing or hearing nothing but the little birds who are twittering overhead, he stoops to kiss the sweet lips that have so often met his in sisterly embrace.

"Oh, Harry!" with a little gasp and a blush, "take care; some one will see us and——"

"Hang Mrs. Grundy," says Harry, with all his old manner; "you know you are mine, Dolly. Not all the fathers or mothers or stepmothers in the British Isles can separate us if we are only true to each other, and that we have promised to be, if it is for twenty years—have we not, my queen?"

"Yes, dear."

They are walking together now up and down between the rows of young larches; no one is near, for it is getting very cold, and most sensible people are gone home to their firesides.

"I have just one quarter of an hour," says Harry, as he looks at his watch; "one quarter of an hour in paradise, Dolly, and then——"

"Only a quarter of an hour, Harry! How shall we say all we have to say in a quarter of an hour?"

"I do not know, darling, how you will manage. I have very little to say except 'Dolly, I love you!' and I have said that for the last twelve years, I think."

"Oh, Harry, if we were only at home at Holme

Regis! It is just tea-time there, and we would go in to the dear old drawing-room, and find Uncle Tom and Aunt Mary waiting for us; and I would make your tea, and give you four lumps of sugar in it as a great treat, and——" a little uncontrollable sob stifles the rest of the sentence. Harry puts his arm round her, and draws her close, close to himself.

"Are you homesick, my darling? Are you not happy? Tell me about your present life, my pretty one."

"Tell me first"—and her voice is firm and composed, as she passes her hand caressingly through his arm—"tell me first, how did you come here?"

"By train from Oxford this morning, and I have been skulking about the place looking for you ever since until now. I had half a mind to walk boldly up to the house, and ask for you, only I thought Sir Augustus might show me the door."

"I wish you had, and yet I do not know. But I do dislike walking here with you in secret, as though we were two criminals."

"You can tell your father that you met me, and walked with me, Dolly, if you like. I may never do it again."

"Yes, I will tell him. I am not ashamed of it," defiantly. "And now we will enjoy our tiny quarter of an hour. Was Mr. Leonard very angry, Harry?"

"Yes, very angry. But he was simply furious when your father's answer came. He said nothing on earth should induce him, under any circumstances whatever, to allow me to marry the daughter of the man who had composed that letter. But it is no good telling you all he said, Dolly; you know a little what my father is like, and that he can say nasty things if he chooses."

"Poor dear Harry!"

"But I do not mind, darling. If you agree to it, we will marry each other somehow yet. I do not mean to say that I shall ask you to live in a garret with me, but I hope by extraordinarily good conduct"—with a comical smile—"by reading hard at Oxford, by giving up smoking, which he abominates, and finally by consenting to go into that business in Derbyshire, which, as you know, I have hitherto refused to do, to move my father's heart to allow me to re-propose in due form for you one day to Sir Augustus."

As Harry stands there in the fading November light, with his square figure, his short curly hair, frank blue eyes, wide mouth, and good-humoured smile, a fair type of a young Englishman, but by no means of the aristocratic young Englishman, few people would give him credit for many higher qualities than good-humour, light-heartedness, and general amiability, but in the speech he has just made Dolly recognises a heroism which speaks volumes for his love, and fills her eyes with tears.

She perhaps alone knows what business, with its confinement, its irksome details, its wearisome routine, will be to Harry, who has seldom sat still in his life, and to whom out-door amusements and physical exercise are as necessary as the very air he breathes. That he should mention so quietly going into that business which all his life he has fought against, and spoken of as worse than banishment, at the same time abandoning his long-cherished scheme of entering the army, and all for love of her, Dolly calls heroism, and to a certain degree so it is. For Harry is not of the stuff of which heroes are made, nor has his education been such as to make him one; therefore she knows how deeply he must love her to cause him to make such resolutions, and again she feels that thrill of pain as she turns her tearful face to him, and cries passionately—

"You shall not, Harry, you shall not do anything of the kind. You may read as much as you please, that I do not object to"—with a little smile—"but go and be shut up in a black, smoky town, which you hate and detest, for me—no indeed, darling, you shall not."

"I would go to the Black Hole of Calcutta for you, Dolly," he answers, quite simply, as though it were the most natural thing in the world, and Dolly feels appalled at the love she has awakened.

"I know you would, dear," she responds, "you love me a great deal too well; but, Harry, I love you too, and I will not accept such sacrifices at your hands."

Harry bursts out laughing.

"Well done, Dolly. You do not know how pretty you looked when you made that grand speech; but although you have always had your own way hitherto, I mean to have mine this time, and"—seriously—"if I may win you I shall mind neither smoke, dirt, nor any other disagreeable. Once we are married, with our respective parents' consent, we shall be rich enough to afford a nice, pretty home out of the black, smoky town; and work, I suppose"—with a sigh—"is good for every one."

"Begin by working at Oxford, dear; that will please Mr. Leonard. You know how much he thinks of learning. Now, if you were only Maggie."

"Ah, if I only were! But now, my sweet, do you know I must really go;" and before she can resist, he has taken her in his arms and kissed her once, twice, thrice, as though he could never, never part from her.

"You will be true to me, Dolly?" he asks, with the suspicion of a sob in his voice.

"Always, dear."

"Against all obstacles and hindrances?"

"Against the whole world."

"My brave little darling! And now, good-bye, for the last time, for I have not a minute to spare;" and so saying he draws her close to him, whilst Dolly whispers into his ear a few words, which bring a softened reverent glow into the blue eyes, as he answers her in the same low key.

Another minute, and he has torn himself away, and is running at full speed down the path to catch his train.

"How cold it is," thinks Dolly, "how dark and dreary!" and she shivers, as she stands watching his receding form, whilst the big tears trickle slowly down her cheeks. It must be very late, and she ought to be home long ago for the schoolroom tea. What is that noise she hears? It sounds like the faint rustling of

a dress. Can any one have seen or heard them? She is getting nervous and silly; no doubt it was only a rabbit or hare scudding across the ferns; she had better get home as fast as she can, for her boy will be waiting for her.

So she walks towards the house with downcast eyes, thinking, thinking of all that she and Harry have said to each other, of how dearly he loves her, and that she and he have promised to be true to one another for all time. A few flakes of snow falling lightly on hat and jacket recall her to herself, and make her hurry her steps as she crosses the high road, and turns into the little kitchen-garden gate.

Some one—a man—is in front of her. She knows him at once. There is no mistaking that firm, free step, that head thrown slightly back, that coat that fits so perfectly and yet so easily, that *je ne sais quoi* that stamps him at any distance as a well-bred Englishman.

"Has he grown taller?" thinks Dolly. "How well his clothes fit him!" and involuntarily she sees before her Harry's indifferently-made suit. Mr. Ingram's is of the same identical pattern yet——

But Mr. Ingram has heard the click of the gate, and has turned back.

"What a long practice to-day," he says, as he takes her gloveless hand—her gloves have disappeared, into Harry's pocket she suspects—"why, you *are* cold!" and he looks down on the little pink fingers, which he still retains in his warm, firm grasp.

Dolly feels dumb and stupid. She is cold, very cold, yet she only answers "Yes" in a very doubtful way, while she commences nervously brushing the snowflakes off her jacket.

Mr. Ingram unfolds an umbrella, which he holds over her. "We had better make the best of our way home," he says; "fortunately we have not far to go, and it is not at present a heavy fall. I have just walked up from the station, as I missed the train I ought to have come by at luncheon-time."

"Yes." She seems to have absolutely no other word at her command.

From under the umbrella he gives her a swift, keen glance.

"No organ to-morrow," he says; "you have had enough of it for to-day." And before she can answer —"How have the tableaux arranged themselves?" he asks. "Have they finished wrangling over them?"

"I do not know," says Dolly; "Lady Travers says they are to be a surprise to the audience."

"Audience!" he exclaims; "but you take a part in them now, do you not?"

"Oh! no."

"Ah! I forgot. You are not out yet, are you?"

Dolly smiles. "You will never forget that speech," she says. "But do you know, Mr. Ingram"—quite eagerly now—"Ferdie is to be allowed to sit up till the end."

"Is he? Poor little lad, I am glad of that. He will thoroughly enjoy it. Who managed that, I wonder?" and again he looks her in the face.

"I asked Lady Travers if he might, and she consented."

Dolly does not mention that consent was given on condition that she should sit by Ferdie throughout the evening, and keep his unruly little tongue in order.

"You are Ferdie's guardian angel," he says kindly, and Dolly blushes, she knows not why.

But by this time they have reached the front door, and as they cross the hall a hum of voices reaches them from the library, telling of the arrival of the expected guests.

"Tell Ferdie I shall come and see him soon," says Mr. Ingram, as he parts from Dolly at the foot of the staircase. "Meanwhile I must go and pay my respects to my lady."

CHAPTER THE TENTH.

TABLEAUX.

IT is past nine o'clock. Time, thinks Dolly, who is not dining down-stairs this evening, that she should descend with Ferdie and the other children, and take up her post in the drawing-room before the guests arrive.

Her toilette has been very lengthy. It has been completed to the running accompaniment of Harry's looks and words, which have not served to accelerate her actions, and it has been disturbed by the idea that her black dress is shabby, and not fit for the occasion.

"I suppose it does not much signify," she murmurs to herself, "for I am only in the schoolroom as yet, and no one knows me; but it *is* shabby;" and ruefully she surveys the creases that time and service have worn in this, her best evening dress. Moreover, she has nothing wherewith to light it up. The little jewellery she possesses is of an insignificant description; the flowers she gathered this afternoon look frostbitten and wretched, and with them she is come to the end of her resources. Just at this juncture there is a knock at the door.

"Come in," cries Dolly; and Rose enters, flushed and handsome, her dark hair and eyes set off by the pale lemon-coloured muslin she wears, her thick hair dressed to perfection by Lady Travers' skilful maid, and in her hand, oh! such lovely flowers.

"Oh! Rose, how nice you look!" exclaims Dolly, in admiration. "I am sure you ought to be put into the tableaux."

Rose looks pleased and self-conscious.

"I have brought you these flowers from Ferdie," she says, holding up her bouquet of choice hothouse blossoms.

"From Ferdie? Why, where did he get them? What beauties they are!"

"I think Geoffrey gave them to him. At any rate, here they are."

"The darling!" ejaculates Dolly, "how thoughtful he is! They are just what I wanted to light up my poor old dress. No; don't go away, Rose I want you to help me."

So Rose sits down, looking on with some astonishment, whilst Dolly sets to work to manipulate the

lovely flowers that lie under her hand. Roses, stephanotis, bignonias, geraniums, maidenhair fern; they are all exquisite and fresh, and the deft little fingers fasten them in here, and weave them together there, in a manner truly magical to lazy Rose.

It does not take long, and Dolly turns to her looking-glass with a smile of satisfaction.

"That is an improvement," she says, heaving a sigh of contentment; "that sweet little Ferdie, how he always thinks of me!"

"Well, so he ought," answers Rose bluntly; "you are always thinking of him."

Dolly has taken the rest of the flowers and made them up into two charming little sprays, one of which she now fastens coquettishly in Rose's dress, reserving the other for Lou; and thus adorned they all three descend into the drawing-room, where they find Ferdie already extended on a small sofa, and occupying an excellent position.

The room is almost empty, save for the presence of one or two ladies who do not take part in the tableaux, and who are gathered round Ferdie, who, gorgeous in black velvet, and Spanish rose-point collar and cuffs, that set off his delicate features, his rose-leaf skin, to perfection, and feeling as vain as any peacock, is conversing with them as though he were at least thirty, putting forth all his attractions, and causing them undisguised amusement.

As the three girls enter, he introduces Dolly with a ridiculous little air of patronage, as though she were his own private property, and drawing a chair for her to his side, says graciously—

"She is my eldest sister, you know, but whilst we were all abroad, she stayed in England to be educated, and now she is come home."

They are nice, kind-hearted people, Lady Mary Baillie and Mrs. Grimstone, and they turn to Dolly, asking her a few questions, till the little group feels quite at home, and begins to talk almost as much as the busy people behind the portières.

For behind those curtains the whole mystery of the tableaux is being enacted, and it is not absolute peace that reigns there. Once or twice Joan's voice is heard a little louder than it should be, but Lady Travers' tones are never heightened, and now she steps out from between the curtains, and advances into the drawing-room to receive her company and see that all is right there.

She gives Dolly her usual sweet, chastened smile, and strokes Ferdie's cheek caressingly, as she gently pushes his couch to the further end of the room, motioning to Dolly to follow, whilst she turns to Lady Mary.

"So good of you, dear Lady Mary, to excuse me for so long!" she says. "I see you have been making friends with my chicks, and with my poor invalid child;" and she looks at Ferdie with a world of sorrow in her blue eyes.

But Ferdie does not respond. He is indignant at being removed from the admirable position he had taken up for himself, and he particularly dislikes to be called an "invalid child." He is on the verge of answering disrespectfully when a diversion is effected by the entrance of the gentlemen from the dining-room and the first ring of the door-bell.

Lady Travers has just time to send the count and the baron, as they are advancing to greet Dolly, behind the portières, when Mr., Mrs., and the Misses Robertson are announced, and the pale girls, accompanied by a pale father and mother, advance into the room, where Lady Travers welcomes them, and Sir Augustus, looking as though his collars were extra high and had been given a double allowance of starch, solemnly marshals them into some of the chairs set for the company, where they sit in solitary grandeur, for the present well cut off from every one.

"It is quite a small affair," murmurs Lady Travers, coming up presently, and seating herself for a few minutes by the side of her colourless guest; "merely a few impromptu tableaux, got up on the spur of the moment by our friend Count Ernstein von Ernstein."

"Yes, just so," responds Mrs. Robertson. "Foreigners are so clever at all that kind of thing."

"And afterwards," continues Lady Travers in a stage whisper, as though she were confiding a secret of importance to Mrs. Robertson's ear, and with a slight uplifting of the eyebrows, "we hope to have some really choice music."

"Exactly," again agrees Mrs. Robertson, quite unmoved by this inviting prospect, though she has an uncomfortable sensation that she ought to show more joy at such an unexpected treat. "My girls will thoroughly enjoy it; they are so musical. What a pretty daughter you have just brought out!"

"No, not brought out yet, she is still in the schoolroom; but I hope to present her next May, so that she should make her *début* in London."

And then there is a fresh arrival, and Lady Travers has to remain at her post by the door, and Mrs. Robertson is no longer the centre of a waste of unoccupied chairs.

"How beautiful Lady Travers looks!" remarks Dolly to Geoffrey Ingram, who is standing by her side, talking now to her, now to Lady Mary Baillie; and there is no dissentient voice, for Lady Travers is beautiful this evening. Her dress is a marvellous combination of maroon velvet, tea-rose-coloured silk, and white lace, her golden hair is lighted up with diamond stars—poor Dorothy's diamonds—her white throat is imprisoned in gossamer lace, her beautiful arms encased in glittering bracelets.

Sir Augustus, stiff and solemn, watches her glide from group to group in the crowd, saying always the right thing to each person, from the stars of the first magnitude down to the poor shrinking little wife of the curate of the neighbouring parish, whom she wins to everlasting gratitude by remembering, with a kind of royal graciousness, how many children she has, and when the baby recovered from the measles. Others have asked after her olive-branches this evening, but no one has taken the trouble to recollect that baby alone had the measles, whilst the others were recovering from chicken-pox.

But Lady Travers never forgets; and Sir Henry

Ancaster, looking at his own shy, dowdy little wife, in whose veins flows some of the bluest blood in England, wonders how a Miss Baskerville, of no particular place and no particular family, ever acquired that *air de grande dame*, which would do credit to a duke's daughter.

By this time the audience is seated, and the performance is expected to begin. From behind the scenes there comes a sweet low sound of music, swelling and rising till it glides into a soft melting arrangement of Schumann's "Du meine Seele, du mein Herz," and the curtains part asunder to reveal, through a faint haze of black gauze, the first tableau. On the frame which encloses it is inscribed, "The Honeymoon." It is a fairly faithful representation of the picture, arranged as it is from memory only, and the effect is extremely pretty. At the piano is seated Anne, attired in the very palest blush pink satin, her hair turned to a warm Venetian gold, her white fingers resting on the notes, whilst her face, by most artistic touching up rendered marvellously Leightonesque in colouring, turns to the man who leans over her. It is the baron, in a black velvet artist's blouse, his dark hair drawn out in wavy masses on either side of his face, his clear olive complexion throwing out the peculiar red-and-whiteness of Anne's skin, his eyes soft and melting, saying as plainly as they can speak the words of the music that literally floats on the air during the performance. At the back hang rich Persian rugs and heavy olive-green curtains.

A little murmur of applause runs through the company, and Dolly holds her breath for very sympathy, seeing them there so motionless, looking into each other's eyes.

"That might be rather a dangerous amusement were it to continue long," whispers Lady Mary to Mr. Ingram; and he feels inclined to respond by telling her the mischief is already done, but he only smiles and assents, and turning to Dolly—

"Do you think you could remain perfectly still like that?" he asks.

"Oh! is not she wonderful?" responds Dolly. "No, I could not do that."

She is not thinking of the stillness, rather she is reflecting on what a curious girl Anne must be, thus tranquilly to sit there and be looked at in conjunction with the baron. At the same time her love of the beautiful is roused to admiration by the perfect contrast of light and dark, the subtle beauty of the picture.

"No, I do not think you could," answers Geoffrey, smiling down on Dolly's soft true face, as the portières re-close and shut out from view Anne and the baron. The picture immediately becomes animated as the baron seizes Anne's hand; but he has only time to murmur "Brava!" before Joan steps on the stage to busy herself about the next tableau.

In the drawing-room the applause is vociferous. Every one has felt, somehow, that there is something more than meets the eye in the picture that has been presented to their view, and more than one has echoed Lady Mary's opinion. Still, that touch of nature makes it all the pleasanter, and the applause is no doubt heightened by the glorious food it will provide for gossip for the next few weeks, till some fresh event shall once more stir up the stagnation of that part of Blankshire.

"Are not you going to act?" asks Dolly of Geoffrey, as he comes back to her side, after a short tour round the room.

"My turn has not come yet. I have just heard, by-the-by, that this entertainment is to terminate with a musical recital from the count."

"Really!" cries Dolly, in delight. "Oh, how nice!"

"But," says Mr. Ingram, with his gravest air, "I am afraid you will not be here to listen to it. Little girls who are still in the schoolroom do not usually keep such late hours."

Dolly's face falls to zero.

"Don't you think, really, that I shall be allowed to stay up for it?" she asks, with such a sweet, pleading, childish air that Geoffrey cannot but relent and smile.

"I was only joking. Of course you will stay up," he answers; "and you and I will pass our criticisms together on the performance."

Dolly's face is once more radiant. They are sitting right at the back of the room: Ferdie in the centre of the group, chattering away to every one and enjoying himself immensely, Rose and Lou a trifle sulky at being so much in the background, Dolly, supremely happy, between Ferdie and Lady Mary, with a nice cosy little niche behind her, into which Mr. Ingram slips from time to time, Lady Mary being an old friend of his, to whom he is like a nephew.

In her black dress and remote position, Dolly is not much noticed. One or two people remark what a pretty-looking girl that is with Lady Mary, but very few have an idea that she is Sir Augustus's eldest daughter. Some one, seeing her bending over Ferdie, has taken her for the governess, and has wondered that Lady Travers should have chosen one so youthful and so pretty; but beyond that she excites little remark, and being seated, no one can see the erect lissome figure, or note the proud little turn of the head.

"There is the music again," she exclaims. "But it is not the count playing, is it, Mr. Ingram?"

"Certainly not," answers Geoffrey as he listens to the sounds issuing from behind the curtain, pretty enough in themselves, but lacking the count's genius. The count is otherwise employed.

As the curtains are drawn back, revealing the perfection of a winter landscape, all hoar-frost, icicles, and snow, he is discovered in the character of the Margrave Louis of Hungary, as he stands upbraiding his wife, Elizabeth, with taking food to the poor, and asks her what she has concealed in her apron. In obedience to his command Elizabeth — Lady Travers—opens it, and reveals, instead of food and wine, a lapful of glorious roses.

It makes a charming tableau: The count, tall and massive, towering above the fair shrinking Elizabeth, his countenance at once fierce and contemptuous, with just a touch of brutality in it, suitable to the

character of the times in which the scene is supposed to be laid; Elizabeth, a mixture of piety, modesty, and shrinking timidity, athwart which darts a faint, essentially feminine, gleam of triumph at having so completely and providentially tricked her lord and master as she holds out her apron and discloses, amidst frost and snow, roses that would have done credit to June.

The audience is delighted, the applause is long and noisy, and the curtains are drawn to be once more opened, and the pretty picture gazed upon for a short time longer.

"That is really charming," says Lady Mary; and Geoffrey, who is smiling in an odd little way to himself, assents, as Ferdie beckons him to his side, and whispers, with a malicious little grin—

"Would not mother enjoy taking in some one like that?"

The very same thought has been crossing Geoffrey's mind, but he reproves Ferdie with gravity, and retires from the room, saying his turn has come now.

As he slips out at the back, a tall sad-looking man, with melancholy brown eyes, comes up to Lady Mary, occupying the recess he has just vacated. Lady Mary greets him with much warmth.

"I am so very glad to see you, Lord Rushbury. I hope all the children are quite well."

"Pretty well," he responds in a hopeless, nerveless kind of way; "but they are all perfectly unmanageable." And he sighs so heartrendingly that Dolly is filled with pity for him, and jumps at the conclusion, which is a correct one, that he is a widower.

"Poor little things!" responds Lady Mary. "Have you a good governess for them?"

"We had a very good one, but she is going to be married, which renders her quite useless now;" and again he heaves a sigh as he continues—"My poor mother is quite in despair about the children; they are so extremely naughty, and they never dream of obeying me."

"If you will excuse me, Lord Rushbury"—with the faintest intonation of impatience—"that must be your own fault."

"No doubt, Lady Mary," he answers mournfully; "but their dear mother never liked them to be punished or even spoken to harshly. That is a very sweet, pretty-looking governess Travers has got for that poor child," he continues in a lowered voice—"but she is nothing but a child herself," and he glances at Dolly.

"You are quite mistaken. This is Sir Augustus's eldest daughter.—Miss Travers, let me introduce you to Lord Rushbury;" and Lady Mary, having got rid of a neighbour, makes room for him between herself and Dolly, and prepares herself to give a patient hearing to all his woes.

"I have been looking for Miss Travers—Miss Joan," he adds parenthetically, "all the evening, but I cannot see her. My mother wants her to come over to Rushbury and stay with us a few days. She is so bright and clever, and manages somehow to amuse the children."

"She is an admirable girl altogether," responds Lady Mary, jumping at once to a rapid solution of poor Lord Rushbury's difficulties. If ever any one were put into the world to marry and take the command of a widower with ten children, that person is Joan. She was a great friend of the late Lady Rushbury's, and has energy enough to discipline a whole school. She and Lord Rushbury must certainly come together; and as the latter continues to talk in his low monotonous voice, Lady Mary settles how they shall meet at her house, and the whole affair be arranged.

And now once more the curtain is drawn aside, and the audience, by this time strung up to the right pitch of expectation, looks eagerly to see what picture is to be put before them. On the frame is written "A Winter's Tale."

From behind the scenes a sudden burst of music strikes on the audience, to which they pay little attention, for all eyes are fixed on Lady Travers in her character of Hermione.

The scene represented is the last in the play, the moment when Hermione is about to descend from the pedestal to the sound of the music that Paulina has ordered to play. With her beautiful hair arranged like that of an antique statue, and delicately powdered to represent a few grey hairs, her blue eyes wide open, as she gazes on the king with stony statuesque immobility, draped from head to foot in soft, wavy cream-coloured material, hanging in delicate folds around her, one tiny foot extended as for the first step from the pedestal, Lady Travers looks the very embodiment of the beautiful calumniated queen. On one side of her kneels Anne as Perdita, with hands beseechingly outstretched, whilst Geoffrey Ingram, as the King, is in the act of starting forward to embrace the long-lost wife, his face betraying all the varied emotions he is experiencing. Joan is Paulina, and the baron Florizel.

This time the audience is very quiet. The breathless interest of the scene seems to have communicated itself to the lookers-on, and they have enough to do to gaze at the beautiful Hermione. Anne looks too old for Perdita.

Lady Mary turns to Dolly with her kind smile—

"You should have been Perdita, my dear. You must be about the right age for her."

"How beautiful it is!" answers Dolly, her vivid imagination taking in the spirit of the scene, so that she feels a lump in her throat, and thinks of her own dead mother.

And Lord Rushbury sits with fixed eyes and tightened lips, gazing stonily on the representation of a coming joy which he has lost for ever. Lady Mary is quite glad when the curtain is drawn.

"Mr. Ingram is quite the best," she says, by way of a remark. "The look of yearning tenderness, of expectant, wondering happiness, he contrived to throw into his countenance was wonderful."

"He is not married, is he?"

"No; but I hope some day to see him with a wife good enough for him, for I feel certain he will make

an excellent husband," responds Lady Mary, enthusiastic for her favourite.

But Lord Rushbury does not care to listen to Mr. Ingram's perfections; his eyes are once more roving round the room in search of Joan.

Why is it that Dolly feels a throb of pleasure as she listens to Lady Mary's encomiums? Mr. Ingram's name is Geoffrey, not Harry.

It comes over her that she is very wicked, very heartless, to be enjoying herself as she is this evening, when poor Harry is so miserable. Once more she is walking with him in the plantation, once more she hears his dear old voice, "I would go to the Black Hole of Calcutta for you, Dolly; and her eyes involuntarily fill with tears, to be quickly gulped back again, as she notices Ferdie's keen glance turned upon her. Nevertheless, she continues in a dream, till the music rouses her for the fourth time, and she sees with pleasure that Joan, dear kind Joan, in spite of her change of manner lately, is the heroine this time.

The music is grand and solemn, and yet it is difficult to say whether it be church music or not, but it makes a fitting background to the tableau, which is described on the frame as "Dinah."

It is Dinah preaching, and Dinah is Joan. "How noble she looks!" thinks Dolly, as Joan stands there, in her simple Quaker attire, her lips parted as though speaking, her body slightly inclined, her arms thrown forward, her hands clasped beseechingly, her face aflame with zeal, love, and earnestness. The front row of hearers alone is visible, leaving the rest to the imagination, and in their midst Geoffrey Ingram as Adam Bede, his carpenter's tools slung across his shoulders, his earnest eyes fixed on the speaker, his whole attitude expressive of religious fervour mingled with earthly love.



"ONE OF WHICH SHE NOW FASTENS COQUETTISHLY IN ROSE'S DRESS" (*p.* 137).

"What a perfect Dinah!" murmurs Lord Rushbury.

And though Lady Mary in her heart thinks that Joan lacks the gentleness to make a perfect Dinah, still she assents, whilst adding—

"And what a good Adam!"

"Ah, yes; I forgot Mr. Ingram was intended for Adam. Very good! but he does not take his eyes off Joan."

The buzz of applause and conversation begins again, as the curtain is drawn. Dolly leans over Ferdie, and answers, to the best of her ability, the many questions the child has to put to her concerning the scene he has just looked at.

"Are you enjoying yourself, my darling?" she asks, noting how his quick refined intellect really delights in the tableaux.

"Yes, awfully!" he responds, taking her hand and squeezing it tightly. "I say, Dolly, you must read me the 'Winter's Tale,' and all about Dinah and Elizabeth, to-morrow. I expect I shall dream of them all night."

"You must try, dear, and not think of them too much, or mother will be afraid to let you come down another time."

The boy looks very tired, she thinks, and she is beginning to devise how she can get him to bed, when just as the curtain is about to be drawn back for the fifth time the little face grows suddenly white, the grasp of her hand is relaxed, and she sees he has fainted away.

Every one is looking at the fresh tableau, and Dolly is unwilling to make a fuss. If only Mr. Ingram were at hand! She looks round the room, and espies him in the doorway, standing by some lady whose face she cannot see. She makes him a rapid sign, and in another minute he is by her side, has taken Ferdie in his arms and, followed by Dolly, has borne him quietly out by a door behind them.

"I had better take him to his room," he says, when they have got clear of the drawing-room; and Dolly assents, following him up-stairs till they reach Ferdie's room, where sits stolid Gretchen, his German nurse, whom nothing ever flutters or flurries.

Mr. Ingram lays Ferdie down on his little bed, and side by side he and Dolly kneel by the child, and use all the ordinary means to recover him from his fainting fit, while Gretchen is sent for restoratives.

He is such a long time coming round that Dolly grows alarmed.

"Mr. Ingram, do you not think we ought to send for Lady Travers?" she asks, "and for the doctor?"

Mr. Ingram's smile reassures her.

"Don't be frightened," he answers; "I have seen Ferdie like this before now. He will come round soon. Lady Travers takes a part in both the next tableaux, and it is really not a case for a doctor. Why," he continues, "you look quite ill yourself. I assure you there is nothing to fear, though"—gazing at Ferdie's lifeless face—"it does look very alarming."

"I have never seen any one in a dead faint before," she answers, "and Ferdie is so very delicate."

"Yes, poor little fellow!"

The door is opened, and Gretchen returns, bearing, in addition to other remedies, a bottle of cordial, as commanded by Mr. Ingram; and the latter rises from his knees, takes the bottle whilst Dolly is busied with Ferdie, and pours out a full glass.

"Drink this," he says to the girl, but she shakes her head.

"No, thank you."

Quite imperturbable, he still holds it to her.

"Drink it," he repeats; "it will do you good."

"I would rather not. Oh! if Ferdie would but open his eyes."

"Miss Travers"—with a smile—"will you do as you are told?" and straightway Dolly takes the glass and drains it off quickly, only too eager to return to her boy.

At last he begins to show some signs of life. His blue eyes open quiveringly for a minute, and then close again.

"Ferdie, my darling," whispers Dolly, fanning him gently; and again they open, and gaze fixedly at her and Geoffrey.

The amendment, once begun, is rapid now, materially assisted by Geoffrey's panacea, but the child is still dazed and weak as he requests that Dolly will not leave him, and she assures him she will stay with him all night if he likes.

"He will do now," says Geoffrey cheerily, as he looks down on as pretty a picture as he has seen to-night: Ferdie with his delicately fair face nestling on Dolly's shoulder, whilst she, the colour returned to her cheek, gently kisses his forehead and strokes his golden hair.

"Oh yes, he will do now, thanks to you, Mr. Ingram."

Gretchen has resumed her knitting-pins and the grey stocking which appear to be a part and parcel of her being; the faintest tinge of pink has superseded the ashy pallor which has hitherto been predominant in Ferdie's cheeks; all is going well, and there is nothing to detain Geoffrey any longer. Yet he lingers on, unmindful of the hour, till recalled, by a burst of music which penetrates up-stairs, to the fact that he will be missed if he disappears much longer. Reluctantly he rises from the chair where he has been sitting chafing Ferdie's little cold hands, and ever and anon coming into contact with Dolly's slim fingers as she bathes the child's forehead with eau-de-Cologne.

"I suppose I must be going," he says, "or they will begin to wonder down-stairs what has become of us all."

"It is so kind of you to have stayed so long," answers Dolly, with a sweet grateful smile from her brown eyes. "Will you tell Lady Travers about Ferdie?—or she will wonder where he is, and be fidgety about him."

"And have you forgotten the music, Miss Travers?"

"No, I have not forgotten it, but you see I could not leave my boy."

"You must not go away, Dolly; you promised you would not leave me," puts in Ferdie fretfully.

"No, darling, I will not."

"Would not you spare Dolly—your sister—for one hour, Ferdie?" asks Geoffrey almost severely; but Ferdie's love does not amount to this pitch of self-denial.

"No," he cries. "It is very cruel of her to think of leaving me."

"Well, then, good-bye," says Geoffrey, with a smile to Dolly. "I will tell Lady Travers all that has happened, and explain everything to her," and with that he opens the door and leaves the room, not without giving one last wistful look back ere he quits the threshold.

END OF CHAPTER THE TENTH.

IN SEARCH OF THE SHIPWRECKED.



RIGHT in the middle of the great highway to Australia, about 700 miles from the Cape of Good Hope, there is a group of uninhabited islands called the Crozets, upon which, within the last sixty years, at least two companies of shipwrecked people have had to spend many months in misery and almost in despair. These islands have recently been visited by H.M.S. *Comus*, under special instructions of the Admiralty, for the double purpose of ascertaining if any "castaways" were living there, and to establish provision depôts for the benefit of any poor wretches who might hereafter be driven upon those barren rocks.

For a long time fears had been entertained that some of the crews and passengers of certain "missing ships" might have taken refuge on the Crozets; but after a long and careful search all through the group, and after repeatedly firing guns to call attention to the ship's presence, Captain East, who was in command, perfectly satisfied himself that there were no human beings on any of the islands, waiting to be rescued. It would have been good news for the friends of passengers in the *Knowsley Hall* and other ships, who had written to Captain East, if he could have brought them some tidings of those for whose safety they had continued to hope against hope, but he has no such message to deliver. No traces whatever were found to indicate that any shipwrecked people had been on the islands since the survivors of the *Strathmore* left them in 1876.

It was the story told by these survivors which led to the visit of the *Comus* to the Crozets. That story also revived the recollection of a shipwreck which occurred at the same place more than half a century before, when fifteen men were doomed to remain in captivity there a year and ten months. In the narrative which was given by the rescued crew of the *Princess of Wales* another Defoe might have found ample materials for another "Robinson Crusoe." One of their number, named Goodridge, did indeed write an account of the terrible experiences of himself and his companions on the "desert island," which was so full of interest that for many years he lived on the profits of the sale of his book. The *Princess of Wales* was on a voyage to Prince Edward's Island, when she struck on one of the Crozet rocks. The crew escaped in two boats, but they saved nothing from the wreck except a tinder-box, a frying-pan, a gridiron, a lance, and a few knives. The two boats speedily got separated, and for a long period the men in each supposed that their companions were lost. Seven men landed from one of the boats on the 17th of March, and it was not until the following December that they had the joy of seeing their eight shipmates rowing up to the beach in search of better quarters than those in which they had thus far kept up the struggle for existence. Both parties had gone through precisely similar hardships, and had adopted the same devices in providing themselves with food and clothing. They caught and killed seals and penguins and molly-hawks; and when their clothes were worn out, new garments were made of seal-skins, which the poor fellows sewed together with sinews of the sea-elephants by means of an old nail sharpened as a needle.

All through the twenty-two months of their dreary residence on the island, one old man made it his duty to keep watch for passing ships; and when at last he exclaimed, "A sail! a sail!" the men rushed to the highest part of the island and lighted a fire with the blubber of the sea-elephants. This signal fortunately attracted the attention of a schooner, the captain of which sent a boat ashore. The poor fellows were so eager to escape from their prison that they could not wait until the boat reached the beach; they dashed into the water and made towards the boat, but finding themselves hampered by their seal-skin trousers, threw them off, and so gained the boat, much to the consternation of their rescuers, who were more than half inclined to think that they had met with a new race of beings! The whole of the fifteen men were at once taken on board the *Philo*, of Boston, and in due course were forwarded to England.

The survivors of the *Strathmore* were not detained on the Crozets so long as were the sailors of the *Princess of Wales*, but their experiences were in every way as painful and extraordinary.

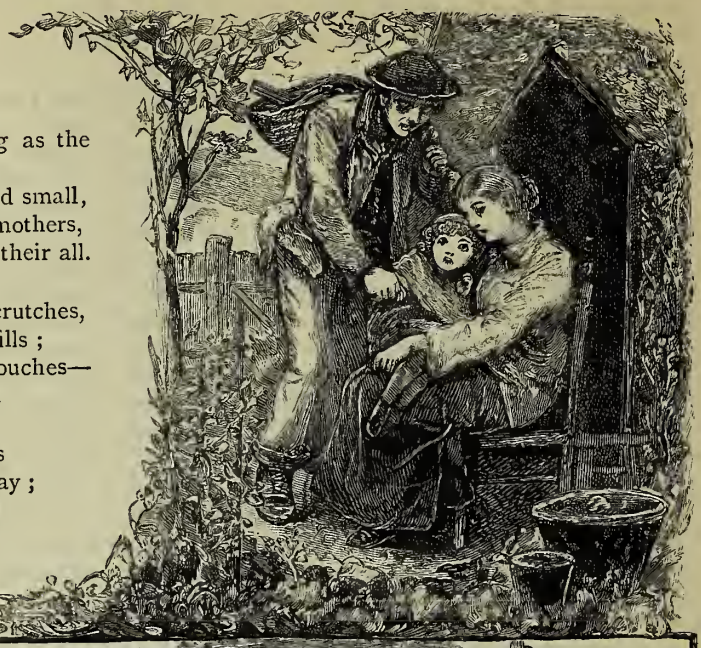
When the *Strathmore* left Gravesend, on April 19th, 1875, she had on board fifty passengers and a crew of thirty-eight men. She had not been long at sea before some of the sailors got at the wines and spirits, and rendered themselves so incapable of attending to their duties, that for a considerable time the whole work of the ship had to be done by three men besides the officers. As the Equator was approached the still half-intoxicated wretches insisted upon the observance of what used to be the invariable custom on "crossing the Line"—that of shaving the "Johnny Raws." More drunkenness followed, and with most of her crew helpless, and her passengers disgusted and in dread of what might happen, the good ship sped to her doom. For some days before the catastrophe she sailed under a gentle breeze in weather so thick that no observations could be taken, and the captain was so far mistaken in his calculations of her whereabouts, that only two hours before she struck he declared that they were eighty-seven miles away to the south of the Crozet group. Not a few of the passengers had sad

forebodings of their impending fate, and some of them refused to leave the deck for the night. At a quarter to four in the morning of the 1st of July the *Strathmore* went heavily on to the rocks, and immediately began to fill and settle down. Amid the scene of confusion and terror that followed, the captain seemed like a man distraught; with his hands clasped convulsively behind his back, he paced up and down the deck, shouting wildly, "It's all over with us! we are all drowned!" With as much energy as they could command, the scarcely sober seamen got out the boats, only to let one after another sweep away on the waves. The dazed captain could give no orders, and the poor terror-stricken passengers were left to shift for themselves, and even had to struggle with the selfish sailors for places in the boats that were finally launched. Big seas broke over the ship, and the unfortunate creatures who were too young or too feeble to climb into the rigging were swept overboard and drowned. The captain, the first mate, and a passenger were the first to disappear. Then, as the life-boat passed under the projecting rigging, two brothers leapt for "dear life;" but one fell short of the boat and was lost. When the crowded boat had drifted away from the ship, all but five of those in the rigging made their way down to the deck-house, and thence to the forecastle-head. Here they waited, hungry and cold and miserable, until daybreak. The second mate and a party then contrived to launch the gig, and the third mate, with three other men, put off in the dingy. At first the gig was rowed along the north of the island, but as no landing-place was found there they passed round to the south side, where a safe landing was at length effected. Shortly afterwards the life-boat was observed drifting about some little distance away; she was towed to the beach by the men in the gig, who then went back to the ship. The five survivors still left in the rigging were safely brought away, but night having come on, and with it a dense fog, nothing further could be done towards rescuing the unfortunate people crowded together in the forecastle-head. They were of necessity left to pass the weary hours in terror and misery indescribable. It was a bitterly cold night, and they had no food except a few biscuits, and none could tell whether the ship might not go down before daylight permitted the boat to return. Happily, all were taken off next morning, and the night following the *Strathmore* disappeared. Forty-nine souls in all were found to have been saved from the wreck, amongst them being but one woman and one child. The first night a boat's canvas served as a tent for the lady and the boy; all the rest had to be content to sleep on the cold rock and under the open sky.

It was hoped that some part of the cargo or passengers' luggage would float ashore as the ship broke up, but the only package that reached the poor people was a blanket-chest, which, however, besides a few welcome coverlets, also contained some knives and forks, a few spoons, some tins of preserved meats, and two parasols. These tins and parasols proved exceedingly serviceable, the empty canisters being used as pans, and even as lamps, while the parasol wires were converted into needles. With these rough needles, and threads drawn out of the boat's canvas, or long grass when thread was no longer to be had, the men stitched penguin-skins together, and so made themselves "new garments" when their old ones became unwearable. An albatross was killed the first day, and served the people with meat for about three weeks; then they had grey-birds and penguins; and when birds could not be caught, they lived on a sort of grass like the tops of carrots, which abounded on the island. When the canisters were worn out, the cooks of the party made use of hollow stones in which to boil the birds and vegetables. No trees grow on the island, and therefore to build themselves a hut the castaways had to gather up all the scraps of wood that happened to float ashore. One poor fellow died shortly after the party landed, apparently from fright and excitement, and four others succumbed to the terrible hardships and privations of life on a desert island. To attract the attention of passing ships a tower about twelve feet high was built of turf, and an oar placed on the top. From July to January only four ships passed close enough to the islands to be seen; two of them went very near, but the signals made by the shipwrecked folks with blankets appear not to have been observed from the sea. It was not until the 21st of January that their presence on the islands was discovered. An American whaler was passing, when the captain, who had gone up aloft to have a look at the vast rocks, noticed something unusual on one spot, and ordered his ship to stand in, that he might ascertain what it was. A man was sent aloft into the "crow's-nest," and reported that some kind of signal was being made by people on shore. Boats were quickly lowered and sent off to the island; the lady and five feeble men were first taken to the American ship; provisions were afterwards carried to the overjoyed castaways, and next morning they were all rescued from the barren and lonely spot on which they had spent nearly seven miserable months. At first the American captain proposed to leave the rescued party on Hog Island (one of the Crozets) until he had finished his cruise, but he was persuaded to change his course, so that the poor creatures, who had already suffered so much, might as speedily as possible be sent back to England.

When the Crozets were visited by H.M.S. *Comus*, at the early part of last year, the cairn erected by the passengers of the *Strathmore* was still standing, and could be seen at a great distance. An old hut found in another part of Apostle Island (where the *Strathmore* was wrecked) was stored with provisions; Penguin Island was found quite inaccessible; but on Hog Island and Possession Island huts were built by the crew of the *Comus*, and after being well filled with tinned meats of various kinds, they were covered over with painted canvas, and a notice-board fixed to each, bearing the following words:—"These provisions are only for shipwrecked people.—H.M.S. *Comus*, March 6th, 1880."

A LITTLE CRIPPLE.
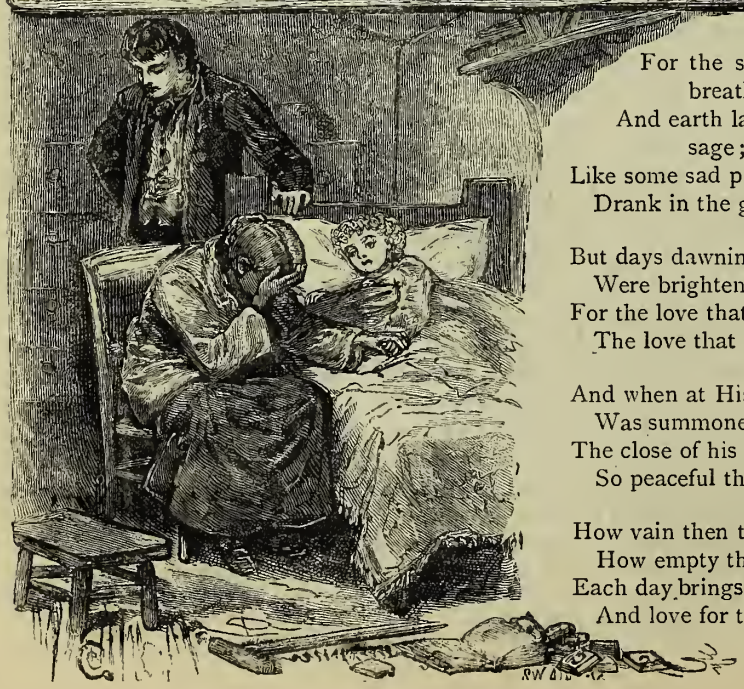


THOUGH he was not sturdy or strong as the others,
And aged before boyhood, decrepit and small,
Such depth hath the yearning of fathers and mothers,
They loved him at home, as their treasure, their all.

A cripple past hope, he was doomed to bear crutches,
And life promised nought save a burden of ills ;
Yet his eyes had the light which softens and touches—
The look of the reindeer at bay on the hills.

He wistfully noted the sports and the gambols
His brothers and sisters enjoyed the long day ;
Alas ! not for him were the races and rambles
In the meadows so near, yet so far away !





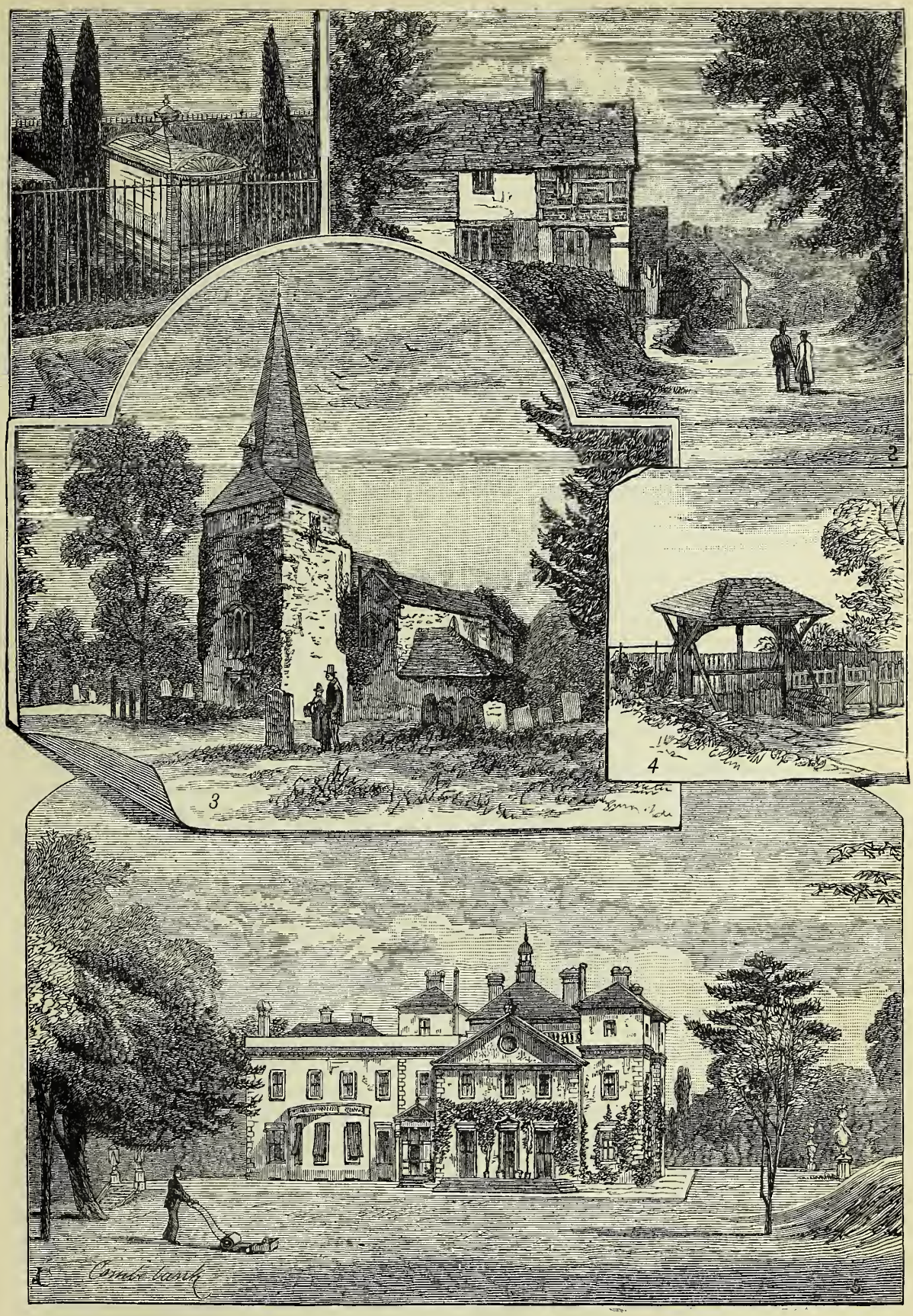
For the sun might shine brightly, and breezes breathe mellow,
And earth laugh to scorn the dull thoughts of the sage ;
Like some sad pining bird, this poor little fellow
Drank in the glad life through the bars of a cage.

But days dawning sadly, and dimming so slowly,
Were brightened at least by affection's true worth ;
For the love that all bore him was pure and was holy,
The love that can make a sweet garden of earth.

And when at His beck'ning this child and this cripple
Was summoned where sorrow and death hold no place,
The close of his life seemed the close of a ripple,
So peaceful the look on the wan little face !

How vain then the thought that His mercy is narrow,
How empty the doubt of the "sceptical mind" !
Each day brings its crumb for the snow-frozen sparrow,
And love for the helpless, the halt, and the blind !

REGINALD BARNETT.



BITS ABOUT SUNDRIDGE. (*See p.* 146.)

1. TOMB OF BEILBY PORTEUS, BISHOP OF LONDON. 2. OLD COTTAGES ON THE WAYSIDE LEADING FROM THE CHURCH.
3. SUNDRIDGE CHURCH. 4. LYCH-GATE. 5. PRESENT RESIDENCE OF MR. SPOTTISWOODE.

A HOLIDAY VISIT TO SUNDRIDGE.



OUR visit to Sundridge was made in the beginning of May, at that beautiful season when everything is full of promise.

"The penetrative sun
His force deep-darting to the dark retreat
Of vegetation"—

had brought forth new life from every buried seed and root. Innumerable varieties of tender herbage covered the hills and dales, and on the recently bare branches of the trees trembled a complicated network of fresh young foliage, through which the blue sky was pleasantly visible.

Sundridge ought to be spelt Sundrish. In the Domesday Book it is written Sondresse, and in the *Textus Roffensis*, Sunderersee. The vulgar tongue, however, has probably found the "drish" difficult of pronunciation, and the corruption of the concluding syllable is now universally adopted.

Like many other parishes in the See of Canterbury, Sundridge was a subject of dispute at a very early period in its history. We are told that the great Earl Godwin unjustly withheld it from the archbishop in the reign of Edward the Confessor; and after the Conquest, Odo, the powerful Bishop of Bayeux, half-brother to the Conqueror, took possession of it with other places. But when he was disgraced for his ambition, Lanfranc, the Lombard monk who had been raised to the archbishopric on the deposal of Stigand, recovered it again in a solemn assembly which was held by the king's command on Pinenden Heath in the year 1076.

The survey for Domesday being taken after this event, it was there entered as the property of the archbishop, and was taxed at one suling and a half. In demesne there was at that time "three carucates and 27 villeins, with nine borderers having eight carucates;" there were also "eight servants and three mills and an half of 13 shillings and an half; eight acres of meadow, wood for the pannage of 60 hogs, and a church." The surveyor adds: "In the whole, in the time of King Edward the Confessor, it was worth 12 pounds; when he (the archbishop) received it, 16 pounds; and now 18 pounds; yet it pays 23 pounds and one knight in the service of the archbishop."

In the reign of Henry III., the manor of Sundridge was let to the family of Apulderfield by the Archbishop of Canterbury, probably to Sir Henry de Apulderfield, who was with the king in Gascony in 1230. Later on, in 1254–5, his son Henry appears as plaintiff in a trial against another Henry de Appulderfeld, who with Letitia, his wife, seems to have laid claim to a third part of the manor of Sundridge with its appurtenances, which claim, however, does not seem to have had a very certain foundation, since they lost the issue.

In the twentieth year of the reign of Edward III., Sir Ralph de Frenyngham, knight, appears to be the possessor of the manor of Sundridge, and we are told that he paid aid for it, one knight's fee, at the making of the Black Prince a knight. Sir Ralph was lord of the manor of Frenyngham, or as it is now called, Farningham, and he resided in that place. Twelve years after he became the owner of Sundridge he was made sheriff of the county, but he did not enjoy that high station long, for he died the following year. The same honour was bestowed upon his son John by Richard II., in the seventeenth year of his reign. John died possessed of the manor of Sundridge in the thirteenth year of King Henry IV., and as he had no issue, he bequeathed it to his kinsman, Roger Isley. William, eldest son of this Roger, seems to have paid an annual rent of £22 12s. to the archbishop in addition to the fee of one knight's service when he came into his inheritance. He was sheriff of the county in the twenty-fifth year of Henry VI., and died three years after the accession of Edward IV. As he left no children, an inquisition of his property was taken at St. Mary's Cray in the following year, and John, a son of his brother John, deceased, then twenty-two years of age, was declared to be the heir.

In the fourteenth year of King Edward IV., this John Isley became justice of the peace and sheriff of Kent. He died in the year 1483, and was buried in Sundridge Church. Thomas Philpott, who wrote a survey of Kent about the middle of the seventeenth century, informs us that the inscription on his tomb was legible at that time, but it is now destroyed.

John Isley left an only son, Thomas, who was married to Elizabeth, daughter of Sir Richard Guldeford, Knight Banneret of the Garter, and Comptroller of the Household to King Henry VIII. He died in the eleventh year of the reign of this monarch, leaving ten sons to maintain the honour of his name, and three daughters.

Henry, eldest son and heir of Thomas Isley, was also a sheriff of the county in the thirty-fourth year of King Henry VIII., and the fifth year of King Edward VI., but being concerned in the rebellion raised by Sir Thomas Wyatt a year after the accession of Queen Mary, he was attainted and executed at Maidstone or Sevenoaks. His lands, as a matter of course, were confiscated to the Crown; but on the payment of £1,000 by his eldest son William, the manor of Sundridge, with all other lands, tenements, &c., forfeited by reason of the attainder, was restored to the family by Queen Mary. William Isley, however,

was not able to keep the heritage he had redeemed at such a costly price. We are told that he soon afterwards became greatly indebted to the Crown, and was obliged to convey his manor of Sundridge to the queen, her heirs and successors, in payment of his dues; and it seems to have remained the property of the Crown until the reign of James I. That king, by letters patent dated at Nonsuch in the twenty-second year of his reign, granted it to Nicholas Street and George Fouch at the yearly rent of £42 12s. This "fee farm" next passed into the possession of William Saville, Marquis of Halifax, on whose death it became the property of his daughters and co-heirs, and on the division of his estates among them it was allotted to Richard, Earl of Burlington, in right of his wife Dorothy, one of the co-heirs.

Shortly afterwards the estate of Sundridge appears to have been regarded as two manors. At the latter end of the reign of King Charles I. a person named Brooker conveyed it, under the titles of Sundrish Upland and Sundrish Weald, to Mr. John Hyde, second son of Bernard Hyde, one of the Commissioners of Customs to that unfortunate king. Mr. Hyde resided at Sundridge Place, where he died in 1677, and was buried in Sundridge Church. His son Saville inherited the estate, but resided at Quarendon in the county of Leicester. In a note Hasted remarks: "He" (Mr. Saville Hyde) "has lately pulled down the ancient mansion of Sundrish Place, and erected a farm-house in its stead." "On the east side of the church is a fine old romantic spot of ground, which was formerly the warren belonging to the old castle (or mansion), and still retains that name; and a little further to the east are several large ponds, which supplied the manor-house with fish. In the warren is a fine spring of water, and some very deep dells, now overgrown with trees and shrubs, from whence probably was dug the stone that built the castle and the church."

Henden, or Hethenden, as it is written in ancient records, is the chief manor in the parish of Sundridge. It lies on the southern side, in a beautiful part of the Weald below Ide Hill.

This estate was formerly part of the possessions of Bartholomew de Burghersh, who died in the twenty-ninth year of the reign of King Henry III. His eldest son Bartholomew, who inherited the property, was a man of great military reputation. At a very early age his courage in the French wars attracted the attention of King Edward III., and on the institution of the Order of the Garter he was made a Knight Companion as a reward for his merit, although he was then only twenty-four years of age. On his death Henden and his other estates passed into the possession of his only daughter Elizabeth, who was married to Edward le Despencer, a grandson of Hugh le Despencer, the younger favourite of the unfortunate Edward II., whose pernicious counsels with those of his father cost that unfortunate monarch his kingdom and his life. He attended the Black Prince into France, and was present at the famous battle of Poitiers. In the thirty-first year of the reign of King Edward III. he was summoned to Parliament, and died eighteen years afterwards at his Castle of Kaerdiff. His only son Thomas, commonly called Lord Despencer of Glamorgan and Morgansk, inherited Henden and his other estates. He was advanced to great titles of honour in the reign of Richard II., and created Earl of Gloucester. On the deposition of that monarch he forgot all the benefits which he had received from the unfortunate king, and ranged himself on the side of his enemies. But this perfidious behaviour met with a just punishment. The very first year after the accession of King Henry IV. he was degraded from his rank of earl for the part which he had taken in the death of Thomas of Woodstock, Duke of Gloucester, and compelled to flight from a fear of further proceedings. He was, however, taken at Bristol, carried to the market-place by the rabble, and there beheaded. The following year he was adjudged a traitor, and all the lands which he had in fee upon the 5th of January, in the first year of King Henry IV., with his goods and chattels, became forfeit to the Crown. The residue of his property, including the manor of Henden, descended to his son Richard, and on his death without issue, to his daughter Isabel, who was married to Richard Beauchamp, Lord Bergavenny, afterwards Earl of Worcester. Isabel survived her husband, and married his namesake Richard Beauchamp, Earl of Warwick, one of the most considerable persons of his time. At the coronation of King Henry IV. this Earl was made a Knight of the Bath, though only nineteen years old. Five years later his bravery against Owen Glendower won him universal commendation, for he took the standard of the rebel in open battle. He also gained great honour in the battle of Shrewsbury fought against the Percys. At the coronation of Henry V. he was made Lord High Steward "for his own wisdom and indefatigable industry in the king's service." In 1415 he became Captain of Calais and Governor of the Marches in Picardy. In 1417 he was created Earl of Aumarle, or Albermale, in reward for his bravery in France, and in 1420 he was elected a Knight of the Garter. Upon the death of Henry V. he was appointed governor to the young King Henry VI., and afterwards, on the death of the Duke of Bedford, he was made Regent of France, and Lieutenant-General of the King's Forces in that realm and in Normandy. He died at the Castle of Roan, April 30th, 1439; and his wife Isabel did not long survive him, for she died on the 24th day of the following month of June.

The Earl and Countess of Warwick left an only son, Henry, who inherited the estate at Sundridge from his mother. He was little more than fourteen at the time of her death, but was such a favourite with Henry VI that the highest honours were thought insufficient to express the king's affection toward him. He was created Premier Earl of England, and was licensed to wear a golden coronet even in the royal presence. A few days afterwards he was created *Duke* of Warwick, with precedence next after the Duke of Norfolk. A grant was made to him of the islands of Guernsey and Jersey, together with several castles, lands, and manors, and ultimately he was crowned King of the Isle of

Wight. But he did not live long under this weight of honours. He died at the age of twenty-two, on the 11th of June, 1445, and his body was taken to Tewkesbury, where it lies interred in the middle of the choir. Though so young at the time of his decease, Henry, Duke of Warwick, had been married twelve years to Cicely—daughter to Richard Neville, Earl of Salisbury, who was his brother-in-law—by whom he had one child, a daughter, who was two years old when her father died. The young heiress only lived another four years, and then her aunt, Ann, Countess of Salisbury, sister to the deceased duke, became the inheritress of the earldom and her brother's effects. Richard Neville, Earl of Salisbury, by reason of his marriage and some special service he had rendered the king, was allowed to assume the dignity and title of Earl of Warwick, but he is better known in English history by the style of King-maker.

Ann, Countess of Warwick, lived in great distress after the fall of her husband at the battle of Barnet, for the vast estates of the Warwick family were taken from her by Act of Parliament and given to her two daughters. But after their decease, on the accession of Henry VII., she was recalled from her retirement in the North and restored to the possession of her inheritance; the restitution, however, was of little benefit to the countess, for she was immediately afterwards compelled to transfer the whole to the king.

From this time until the reign of Henry VIII. the manor of Henden seems to have remained the property of the Crown. That monarch, by an indenture dated May 12th in the ninth year of his reign, exchanged his manor, lordship, and park of Henden for the manor of Newhall and other lands in Essex, then the property of Sir Thomas Bulleyn, whose daughter Anne afterwards became his queen.

Combe Bank is a seat in the parish of Sundridge now occupied by Mr. Spottiswoode, who is well known in the world of science, and now President of the Royal Society. It is so called from the circumstance of a Roman camp having been made in its vicinity. Urns of an antique shape have also been found while digging near it, which indicate that there was a Roman burial-ground probably for soldiers in the neighbourhood.

Combe Bank has been greatly improved by its present owner. The room in which Lady Frederick Campbell met her tragic fate has been rebuilt, and the great saloon has been beautified by the taste and brush of Mr. Walter Crane. Subjects appropriate to the presence of the President of the Royal Society, and suggestive of hospitality to his guests, decorate it on all sides. On the ceiling are emblematical figures representing the chief luminaries of the heavens with their various symbols, the Four Seasons, and the flight of Time. The frieze is ornamented with antique Italian paintings from Modena, purchased by Mr. Spottiswoode, which, he says, "represent a few glimpses of the Masque of Life, seen at intervals in the procession of the Hours. They show play and pageant, sport and merriment, music and the arts, and other occupations appropriate to a room which is intended for converse with our friends when the serious work of the day is done."

This estate was formerly in possession of the Isleys, and they sold it to a family named Ash about the latter end of the reign of Queen Elizabeth. By them it was transferred to Colonel John Campbell, who on the death of Archibald, Duke of Argyle, in 1761, succeeded to that title. He was the son of the Hon. John Campbell, of Mammore, and his wife was a daughter of Lord Elphinston. Before his succession to the peerage Combe Bank was his chief residence, but afterwards he gave it in his lifetime to his son the Right Hon. Lord Frederick Campbell, who was a Privy Councillor; Lord Frederick was also Lord Registrar of Scotland, and member of Parliament for the borough of Rutherglen, &c. John, Duke of Argyle, while Marquis of Lorne was on the 20th of December, 1766, created a peer of England by the title of Baron Sundridge, of Combe Bank, in the County of Kent.

The wife of Lord Frederick Campbell was the youngest daughter of Amos Meredith, Esq., son and heir of Sir William Meredith, Baronet, of Henbury, and the widow of Lawrence, Earl Ferrers. Mary Meredith was married to her first husband on the 16th of September, 1752, but his cruel treatment and irrational conduct soon obliged her to seek a separation, although she was of a mild and enduring disposition. Shortly after this event Earl Ferrers deliberately shot his steward, probably for the part which he took in the matter of the divorce, and was condemned to the gallows on May 5th, 1760. He endured his sentence with fortitude, but showed his eccentricity by wearing a light suit embroidered with silver, said to have been his wedding garment. He is also said to have prophesied a more terrible death for his widow. This prediction was unhappily fulfilled at Combe Bank on the 25th of July, 1807, when Lady Frederick Campbell was burnt to death in one of the towers. It is supposed that her ladyship became drowsy while reading over her dressing-room fire, and so falling forward ignited her own garments and the furniture of the apartment in which she was sitting. On a search among the débris after the accident, only one bone was discovered, which was buried in a coffin in Sundridge Church.

The Rectory of Sundridge is in the gift of the Archbishop of Canterbury. In 1650 it was returned by the Parliamentary Commission as possessing a parsonage with a house and barns, twelve acres of land, and tithes worth £100 per annum. Its present value is about £700. In the days of pluralities in the Church of England, Sundridge was generally held with the rich living of Lambeth, which was also in the archbishop's patronage. Hasted inserts among the Rectors of Sundridge the name of William Barlow (afterwards bishop), on the ground of a letter from Anne Bulleyn to the king, recommending him to that rectory, which was then vacant. The registers of the parish date from the year 1562. Bishop Porteus resided in this parish, and endowed the (now) vicarage of Ide Hill, and built a church and parsonage house, both of which have since been replaced by more substantial buildings.

SHOE-MAKING FIFTY YEARS AGO AND NOW.

BY A PRACTICAL MAN.



O trace the history of the manufacture of boots and shoes would be to trace the history of civilisation. When man began to protect his feet from contact with stones and dirt, he commenced to have higher aims, and as he has gone on perfecting himself in intelligence, so has he gone on perfecting his boots and shoes.

It can be truly said that in regard both to the covering of his feet and the general capacity of his mind, he stands upon a much better footing now than he did ten or twelve centuries ago.

Shoes are, to a great extent, a token of "respectability." I would not, of course, wish to assert that, because the labouring man wears a clog or a *sabot*, he is morally a less worthy individual than the person who has his "understandings" made of real leather, but merely that they are the index or sign of the outwardly respectable man. Englishmen are far less particular as to the appearance of their boots or shoes than either Frenchmen, Germans, or Italians; but of late years we have made wonderful progress in shoe-making and shoe-wearing. Fifty years ago machinery was scarcely used in their manufacture, consequently the trade in ready-made boots and shoes was very limited. In the shop of the local boot-maker there might occasionally be found a few pairs of misfits from which the urgent purchaser might, if he could, select a pair to his size and taste; but otherwise the "bespoke" boot-maker was content to fetch out his size-stick and measuring tape whenever a customer entered his quiet little shop, which usually contained little more than a few dozens of packets of blacking, a gross or so of boot-laces, a skin or two of leather, a chair, and a piece of carpet some two feet square, on which the customer placed his foot whilst being measured. In a few days, or sometimes weeks, the boots were made; in a few weeks, or sometimes years, they were paid for. The price was certainly high, but the quality was good, and the workmanship strong, and though perhaps not very elegant in style or neat in finish, like the Irishman's horse, if they were "rum 'uns to look at," they were "good 'uns to go."

The introduction of machinery, however, completely overturned this state of affairs; but it, like most other good things, met with a great amount of prejudice at the outset. The members of the "gentle craft" assaulted the enterprising men who purchased, broke their machines, and steadfastly set their faces against having "the bread taken out of their mouths," the result which they firmly believed would follow the general use of machinery. However, the bread was not taken out of their mouths. Machine-work gradually increased, and now by far the greater portion of boot-making is done by means of machinery.

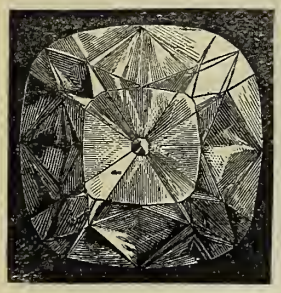
Almost every process in the manufacture of boots can now be performed by machinery. The soles are first manipulated from sheets of leather by knives or "cutters," which are shaped like a sole; these are forced through the leather by a press. The top portions, or uppers, are cut by hand with a knife from zinc or paper patterns, the operation being known as "clicking," and a considerable amount of judgment has to be exercised by the "clicker" in order to cut the largest quantity of uppers from a skin, while at the same time avoiding any holes or flaws that may occur in it. The parts which constitute the upper are then sewn together by wax-thread machines. The upper is next stretched over and tacked on to a last, and for this operation there is a magnetic lasting machine, which cleverly picks up the tacks by the head, pierces the hole and hammers them in, thus of course doing away with the practice shoe-makers have of holding the tacks in their mouths. A cobbler of the old school, when seeing this machine for the first time, gravely remarked, "Ah! yes; it's all very well, but what do you think a cove's mouth's for if it ain't to hold tacks?"

The upper and sole are next sewn together by a sole-sewing machine; the latter is then rolled or levelled by a machine, or hammered by hand by the "putter up." The heel is made either by hand or machinery, and is "sprigged" or riveted on. The boot has now a very rough appearance, the edges of the heel and sole have to be pared, and the latter has to be rubbed with sand and glass paper to smooth its surface; the sides of the heel and sole are then blackened or "burnished" with a hot iron and burnishing ink; but for all these operations machinery can be used, which performs the work much better and faster.

Many materials have been tried as a substitute for leather, but all have failed, proving the truth of the old adage that "there is nothing like leather." The best leather used for the soles of boots is English, which is light in colour; next comes the American, a good, sound, red leather, but which often has its surface scraped and whitened to meet the prejudice of the public against a dark-coloured sole. A third leather much used is Australian, a white leather, spongy and porous. If I may here give a word of advice to the public, it is, Don't discard a boot because it has a red-looking sole; it will wear as long as the best English leather of lighter colour, will resist water equally well, and is generally a much cheaper leather.

There are no less than 52,000 wholesale boot manufacturers and retail boot-makers in the United Kingdom, without counting the operatives employed by large firms, many of whom have as many as 2,000 hands working either in the factories or in their own homes.

HOW ARTIFICIAL GEMS ARE MADE.



GREAT was the excitement among the famous jewellers of Paris when it was first announced that MM. Fremy and Feil had discovered a method of making rubies, sapphires, and Oriental emeralds in fabulous quantities. For awhile they consoled themselves with the reflection that the real stones would always have the advantage over the artificial; but the excitement increased when it became known that the manufactured gems were no imitations, but were absolutely identical with the productions of nature.

Some people thought that Government ought to interfere and forbid the manufacture, while others indulged in fond expectations that now at last the dreams of the alchemists would be realised, and that when gold and diamonds could be made wholesale, all the poverty and most of the misery of the world would cease. With regard to the diamond, we shall have a word to say presently; but as for gold and the other metals, the majority of modern chemists consider them as simple elements, which, though, changing their form and capable of various combinations, are still intrinsically the same, and cannot therefore be produced from any other substances. It is quite a different matter with precious stones, most of which—even those which we prize most highly—are in the eyes of the chemist of very humble origin. The ruby, sapphire, and emerald, and many others are simply clay, or rather alumina, crystallised; while the diamond is closely related to the soot which collects in our chimneys. Others, again—such as the common emerald, aquamarine, chrysoberyl, and jacinth—contain earths nearly related to alumina, as "beryl-earth," or glucina, and "zircon-earth," which are in themselves so little rare or valuable that in some places the poor relations of the emerald are used to pave the streets.

In fact, all precious gems, diamonds and pearls included, are for the most part composed of very common materials—such as alumina, silica, carbon, lime, magnesia, &c.—which we are accustomed constantly to see in other forms. The only advantage possessed by the precious stone is that the common material of which it is composed has crystallised in an uncommon way, its rarity as well as beauty constituting its value. Having therefore ascertained the chemical composition of a sapphire or ruby, if we can induce the various elements to combine and crystallise, we shall have, not imitation stones, but real ones artificially produced. They are as real as the ice made by an artificially lowered temperature, or the chickens produced by an incubator; but after all we cannot be said to *make* them, for we but give them the opportunity and necessary conditions of making themselves.

Chemical combinations and simple substances crystallise when they pass from the liquid or gaseous into the solid state. The most familiar example of crystallisation is that of water, which becomes ice at a certain temperature. Water impregnated with salt and allowed to evaporate will deposit salt-crystals; and if a sufficient quantity of alum be dissolved in hot water and left to cool, it will be deposited in small, transparent, eight-sided crystals, which will *continue to grow* until they attain a large size, if left perfectly quiet, where the water can evaporate slowly. Any impurities or admixture the alum may have contained will remain behind in the vessel as sediment, for crystallisation is generally accompanied by purification. Many precious stones have apparently been formed in this sort of way, as well as most of the less valuable ones, such as rock-crystal, agate, jasper, opal, chalcedony, chrysoprase, cornelian, blood-stone, amethyst, cairngorm, and onyx, which consist mainly of silica, of which the common flint is an impure variety.

At the same sitting of the Paris Academy in which MM. Fremy and Feil announced their discoveries, M. Monnier said that he had obtained opals by pouring a weak solution of oxalic acid on a strong solution of silica and soda, by which the silica was made slowly to crystallise. The introduction of sulphuric acid and protoxide of nickel gave a green crystal like the chrysoprase. Another method of crystallisation is that of the slow cooling of melted minerals. Take a crucible containing melted sulphur or bismuth; let it cool slowly until a crust is formed on the top; make a hole in this, and pour out part of the liquid, and the sides of the hollow thus formed will generally be covered with very fine crystals, the whole looking like a crystal druse, such as amethysts and other half-precious stones often form.

At some time or other in its history, this earth seems to have been in a state of fiery fusion, when all its elements were mingled together in chaotic confusion, and formed the most wonderful combinations. The whole earth in fact was a gigantic laboratory, and the metals played the part of pigments, now sustained by the aniline combinations. But for them the precious stones would have been all alike, and for the most part as colourless as water; it is to the metals they owe their brilliant hues. Rubies and emeralds are both apparently tinted with chromium, the sapphire with cobalt, lapis lazuli with a combination of iron, others with copper, nickel, and manganese.

The really beautiful *imitation* stones made in Paris consist of a very pure, transparent, and lustrous glass, called Strass after its inventor, which is frequently coloured with the same metallic oxides as real precious stones. Thus the colour of the topaz is obtained from antimony and gold; that of the ruby from purple of Cassius (a stannate of tin, with stannate of oxide of gold), or from a solution of gold in aqua regia (nitro-muriatic acid). The well-known Bohemian ruby-glass is coloured with gold, while the ordinary red glass is

produced by copper, and a commoner kind by iron. Some of the finest yellow glass is coloured with silver. The first precious stone to be successfully produced by artificial means was the lapis lazuli, the sapphire of classical times, but by no means to be confounded with the sapphire of the modern jeweller, though closely related to it. Lapis lazuli is an *opaque* stone, of an exquisite corn-flower blue, and was highly prized by the ancient Indians, Assyrians, Persians, Jews, Egyptians, and Greeks. Freed from impurities and rubbed down, it gives the ultramarine used by mediæval artists for the robes of their Madonnas; and in their day it was worth its weight in gold, the purchaser of a picture having always to pay extra for its use. Its rarity and the cost of preparation make the true ultramarine still worth from 10s. to 50s. the ounce.

The ruby and sapphire were the next to attract attention. Several decades ago, a chemist named Gaudin succeeded in obtaining little balls of a ruby-red by melting together pure clay and a solution of chromate of lime, the colour being more or less intense, according to the quantity of chromium used. These balls were so hard as to scratch glass, topaz, and garnet with ease, but they were not crystals, and they were not as transparent as might be wished. Many other chemists made similar attempts, with more or less success. The great thing to be aimed at was evidently the crystallisation of the alumina or beryl-earth; and for this purpose it was necessary that it should be melted, mixed with the colouring metals, and allowed to cool very slowly. The best medium for melting the clay appeared to be boracic acid, which was heated with it in a platinum crucible for a considerable time. As it evaporated, small rubies, sapphires, or emeralds were formed; but their size was too insignificant to make the process remunerative. M. Fremy's new attempts have been, however, much more successful, and proceed on a rather different plan. All clay, even the purest, is a silicate of alumina, this earth being nowhere found pure in a natural state. Taking kaolin, or china clay, the purest of all, which contains from 42 to 48 per cent. of alumina, M. Fremy mixes with it an equal quantity of red lead, and then exposes it to an intense heat for several weeks. The lead not only attracts to itself the silicic acid contained in the clay, but even that of the earthenware crucible, into which it eats its way to such an extent that, in order to prevent loss, it is necessary to place the first vessel in a second. When at last it is allowed to cool, the crucible is broken, and its contents are found in two layers, the upper one glassy, and consisting mainly of silicate of lead, while the lower is crystalline, and contains most perfect crystals of alumina. If nothing but clay and red lead have been used, they are perfectly colourless, but will scratch glass, rock-crystal, and topaz, and are in fact specimens of the precious corundum called diamond spar, because it is next in hardness to the diamond itself. By the addition of two or three per cent. of chromate of lime, the corundum acquires a lovely rose-colour, and becomes a ruby, while a trace of the chromate and a small quantity of oxide of cobalt convert it into the sapphire.

Until quite recently it seemed that, though other gems might be conquered, the diamond would still vindicate her claim to her ancient title of Adamas, the Invincible or Untameable, but it is so no longer. Everybody has known for some time that the transparent diamond was only a peculiar form of crystallised carbon, but the great difficulty which has hitherto baffled all the chemists, has been that of finding some means of dissolving or vapourising this intractable substance, which refuses to melt in the hottest flame and resists the action of acids, alkalies, alcohol, and ether; and though it dissolves in molten cast-iron, is so perverse as to crystallise in the form, not of diamond, but of plumbago or blacklead. It has hitherto been supposed that liquids were the only solvents, but Mr. Hannay and Mr. Hogarth of Glasgow, the successful diamond-makers, found that when alcohol in which potassic iodide had been dissolved was heated above the "critical point," at which it ceases to be a liquid and becomes gaseous, the iodide, instead of being precipitated in the solid form, as they expected, remained in a state of solution or diffusion in the gas. Moreover, a fragment of iodide was dissolved by the gas alone, without coming in contact with the liquid at all. When the gas was suddenly released from pressure, the iodide was deposited in the form of a cloud of snow-white crystals like hoar-frost, which were redissolved when the pressure was increased; and as Mr. Hannay found that a solid when freed from its gaseous solvent was invariably deposited in a crystalline form, he considered that carbon might be induced to dissolve and crystallise in a similar way. On making the attempt, however, he found that plumbago, charcoal, and blacklead still refused to yield to the most probable solvents, even when these were brought to their critical points. Next he bethought him that substances which refuse to combine under ordinary circumstances, will do so readily in the "nascent" state—*i.e.*, at the moment when they are liberated from some other combination; and he found that when a gas containing both carbon and hydrogen is subjected to heat under great pressure, and in the presence of certain metals, the two part company, the hydrogen being attracted to the metal, and the carbon left free. After attacking this nascent carbon with various gaseous solvents, Mr. Hannay succeeded in dissolving it; and, when the pressure was reduced, he had the triumphant satisfaction of seeing the carbon deposited in the form of minute transparent crystals, having all the characteristics of the true diamond. At present the cost of producing them is twenty times that of their market value.

Whether Nature's diamonds have been formed in a way similar to Mr. Hannay's is doubtful; it may be that she, with her unlimited resources, does not always confine herself to one method; but an eminent chemist has recently said, "We are entirely ignorant of the mode of the diamond's formation in nature. The only thing which may be regarded as certain is that it has *not* been formed at a high temperature."

S. Gaye.



"She Dwelt among the Untrodden Ways."

COMPOSED BY HENRY HOUSELEY.

(*Awarded the Prize of Five Pounds offered by the Proprietors of this Magazine for the best Musical Setting of Wordsworth's "Lucy."*)

Andante espressivo.

PIANO. *p*

p

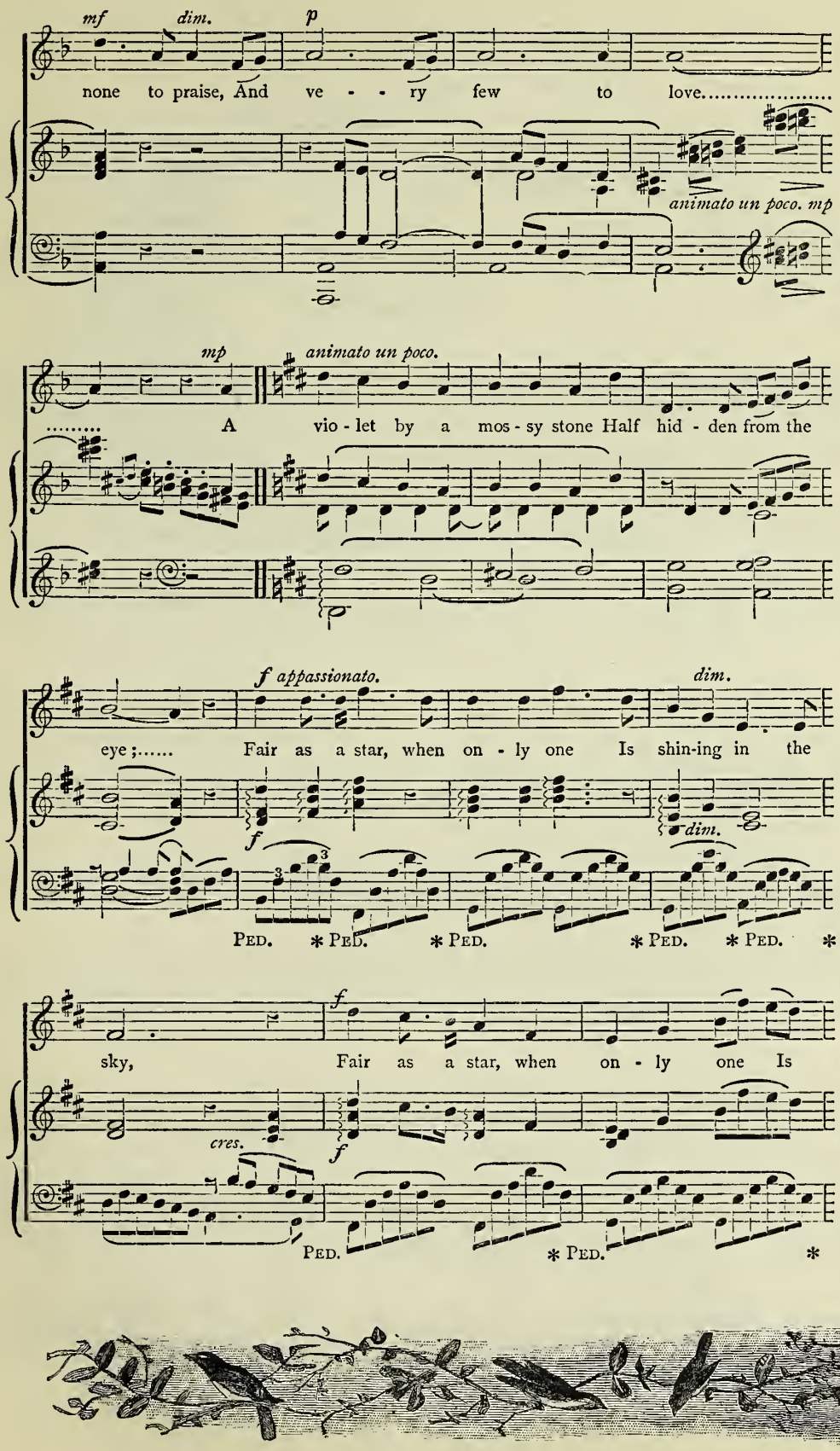
She dwelt a- mong the un - trod - den ways, Be - side the springs of Dove, A
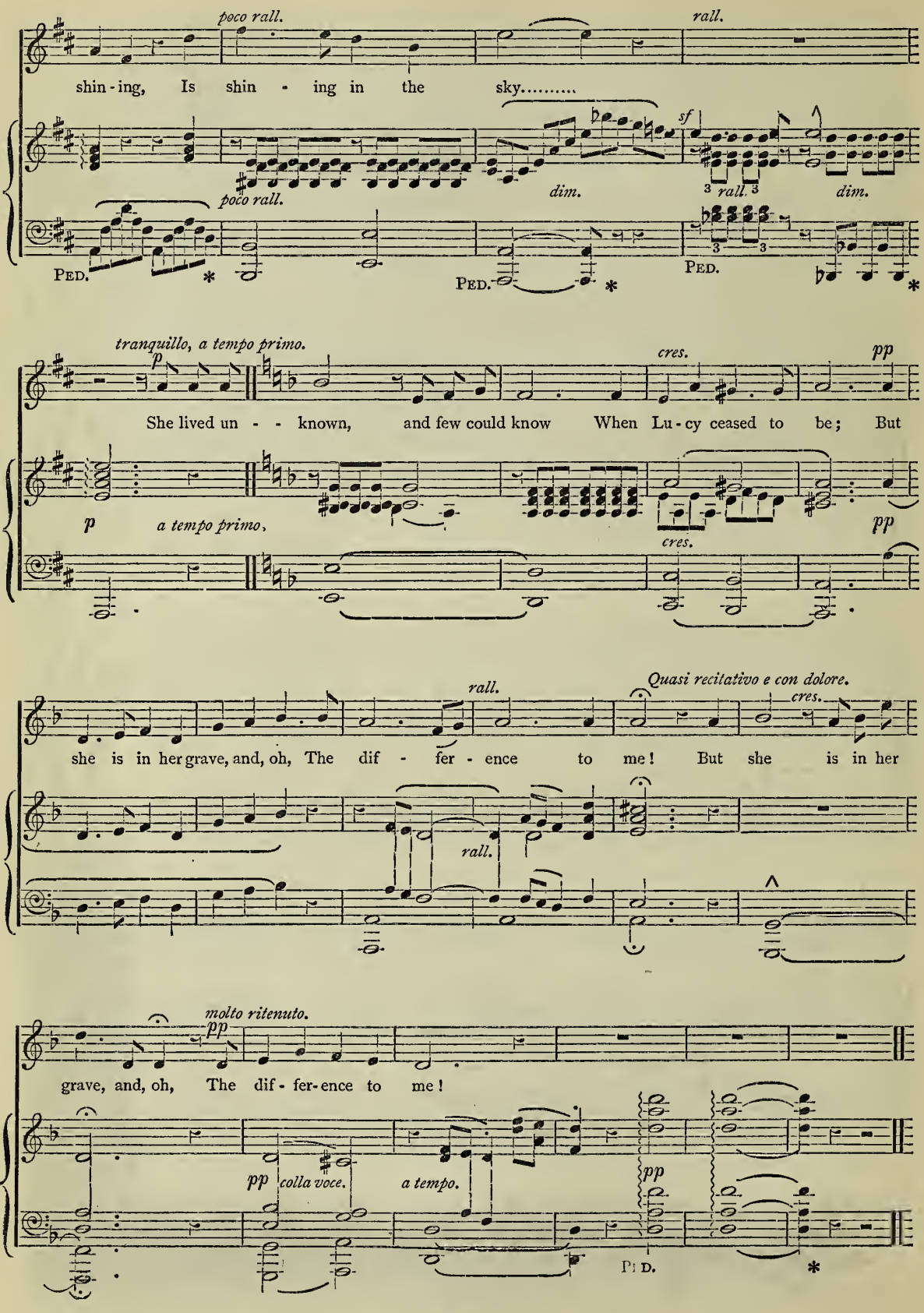
p

cres.

maid whom there were none to praise, And ve - ry few to love, A maid whom there were

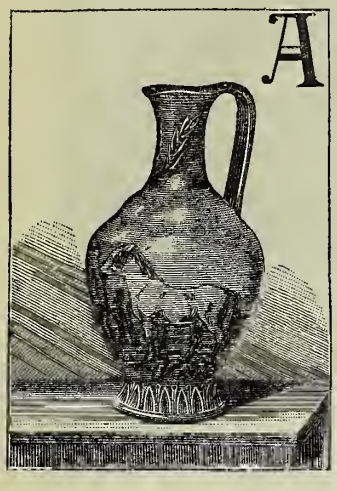
cres.


mf
dim.
p
none to praise, And ve - - - ry few to love.....
animato un poco. mp
mp
animato un poco.
A vio - let by a mos - sy stone Half hid - den from the
f appassionato.
dim.
eye;..... Fair as a star, when on - ly one Is shin-ing in the
f
dim.
Ped. * Ped. * Ped. * Ped. * Ped. *
f
sky, Fair as a star, when on - ly one Is
cres.
f
Ped. * Ped. *


poco rall.
rall.
shin - ing, Is shin - ing in the sky.....
sf
dim.
3 rall. 3
dim.
poco rall.
PED.
PED.
PED.
tranquillo, a tempo primo.
p
cres.
pp
She lived un - - known, and few could know When Lu - cy ceased to be; But
p
a tempo primo,
cres.
pp
rall.
Quasi recitativo e con dolore.
cres.
she is in her grave, and, oh, The dif - fer - ence to me! But she is in her
rall.
molto ritenuto.
pp
grave, and, oh, The dif - fer-ence to me!
pp
colla voce.
a tempo.
pp
PED.

MORE SUBJECTS FOR CHINA-PAINTING.

BY A PRACTICAL WORKER.



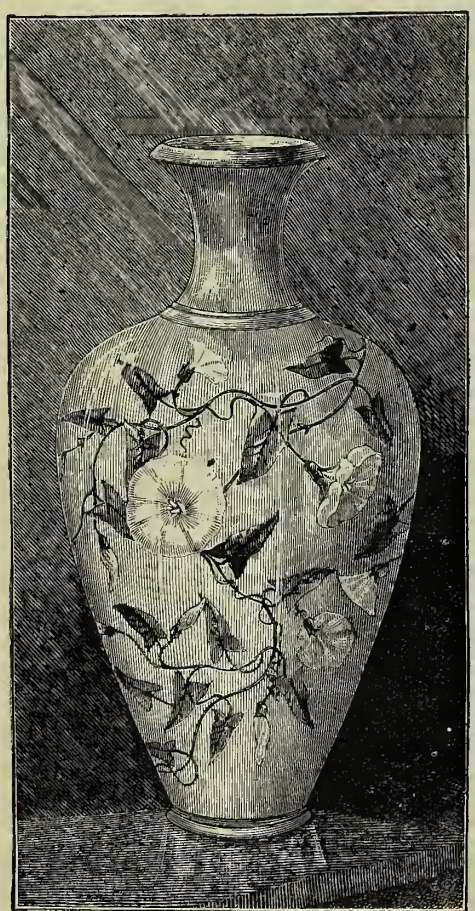
A DECORATIVE plaque for hanging may be composed of *Lilium lancifolium*, with a background of purple royal. The design being sketched in and the ground put in, the flowers can either be left in the pure china shaded with shadow for white, or enamel white can be used, which adds greatly to the richness of the painting. By its use flowers can be painted in actual relief, or it can be employed if preferred simply for the high lights on the petals. The shadows should be washed in first in this case, as the white is apt to soil, and even to chip off if not carefully treated. The mixing of white enamel should be performed with great care on a delicately clean palette, as any dust will materially affect its appearance when fired ; it should be used thick and laid on just where required at once ; it should not be rubbed up with the brush when on, and sufficient quantity should be laid at first if possible. Should it, however, not be found to stand out in such high relief as desired, it must be allowed to dry, and then another coat can be applied. One of its greatest charms is that it can be moulded by the brush into any form. After mixing the enamel on the slab with fat oil, dip the extreme tip of the brush into it, and lay it on the flower, moulding it to imitate the shape of the flower, or the raised portion that is being copied. If used too liquid it will flow over the outline, and will vanish in the kiln. Judiciously used, it is a great power in the hands of the china-painter. The plaque should be sent to the kiln as soon as it is finished ; indeed it is generally acknowledged that all colours are brighter, and appear to greater advantage, when fired as early as possible after being mixed with oil or water ; they fade off and lose their brilliance when allowed to lie by without firing. This is especially the case with rose-colour.

The landscape-painter will doubtless find it easier on commencing china-painting to begin with his own special branch of study. The outline may still be drawn strongly in Indian ink to serve as a guide, although no outline is required in the after-painting for the trees, water, &c. There are many greens to be had suitable for trees, and when mixed with orange, blue, brown, or carmine, any tint may be obtained to give the varied hues of spring or autumn. Roseleaf-green will be found very useful, as it mixes well with so many colours ; blue-green may, however, for some tints be preferable. The principal difficulty will be found in softening the clouds ; these should be washed in thinly and left lighter in the first painting than they are to appear when finished ; they can then be touched up before the second firing ; all soft demi-tints are best left for the last firing. Azure-blue, of which two tints may be obtained, will be necessary for the blue sky, while greys can be mixed for the clouds as required. No harsh, rough edges should be left, but all should be softened down and shaded off with delicate tints of pearly grey. Brown rocks can be washed in more thickly, as brown fires out considerably. The strokes of the brush should in general be allowed to follow the strong markings that indicate the crevices and fissures of the rocks. Should mountains be seen in the distance, they must be washed in with the same colours as those used for the sky, but of a somewhat deeper shade. Distant trees should be of a paler tint than those of the foreground, and partake of a bluer shade mixed with grey ; blue-green is suitable for this purpose. All broad lights and shadows require great care, that their transparency and purity may be preserved. If a tint is found to be unevenly washed in, it should be allowed to dry without alteration. The faults can then be clearly seen, and can be rectified as far as it is possible much more easily than while the colour is still wet. Vandyke brown can be employed in washes and touches on the the stems and branches of trees. There are many varieties of brown, and with the test-tile to assist no difficulty need be experienced in purchasing those most suitable for the artist's purpose. The second painting is chiefly a repetition of the first ; where the tints are sufficiently deep after the first firing they should be left with the simple addition of a few finishing touches. Shadows should be deepened if found wanting in depth, and dark touches on trees, rocks, or buildings added to give sharpness and strength to the landscape. The soft, grey tints must be put in, and any high lights may be scratched out with a penknife. Two or three firings are usually found sufficient, although twelve or fourteen are sometimes necessary in delicate, highly-finished work. there are always risks attendant on this part of the process ; the colours may fire out too much ; some fade more than others, and there is also a chance of the plaque cracking in the kiln, or breaking in its journeyings to and fro. Therefore it is well not to have it fired more often than is quite essential for the perfecting of the painting.

Heads and figure subjects on china are, without doubt, the most sought after at the present time for decorative purposes, and they are not more difficult of accomplishment than flowers, but the drawing must be more strictly correct or the expression will be wrong and the whole painting worthless. The flesh tints can be bought, or mixed by the artist himself. A

mixture of rose-colour and light orange will produce an excellent tint. Red alone can be used, but will hardly give such an exquisite shade for fair complexions. The design being outlined, the background may be put in and allowed to dry, then the flesh tints washed in. They can be dabbled if it is found easier. When dry the shadows may be lightly washed in, and blended into the flesh tints with the dabbler. Care should, however, be taken that the shadows do not trespass too much on the clear complexion tints. Any flat wash can have a few drops of oil of aniseed mixed with the colour on the palette, to prevent it drying too quickly to allow of the free use of the dabbler. The hair must next be washed in broadly; the larger the brush used, the freer will be the treatment and the broader the style. Grey shadows must be used sparingly in the hair, or it will appear heavy. The drapery should harmonise well both with the head and the background. For fair complexions a soft background of turquoise is very lovely, although a stronger effect would be produced by using a rich dark colour, such as purple royal mixed with blue. A celadon ground throws up dark brown hair to great advantage. The drapery is best painted as simply as possible, that it may not detract from the importance which the head should possess. In choosing colours the painting should be regarded as a whole and those tints employed that give to each other, by force of





contrast, the fullest complement of power and brilliance they possess. The finishing touches on the mouth, eyes, eyebrows, and nostrils should be put in last, and the face can then be outlined. For this purpose purple-brown is recommended. Fine sable brushes are best for finishing, especially if smooth, fine work is in hand. The hair must be made out in finer strokes, though no representation of single hairs should be attempted or it will look hard and unnatural. Small locks of hair, or flat curls falling on the forehead, give a softened appearance to the face, while a coquettish little mob-cap on the head adds yet another charm to the piquant beauty of a youthful countenance.

Of under-glaze painting it will be unnecessary to speak at great length, as the method of mixing the colours is the same as that used for over-glaze. The mediums are also the same, but the colours are, as before said, entirely different. The latter colours are dull before firing, and depend on the glaze for their brilliance. It is generally considered more difficult of management, as if a mistake is made in the painting it is very troublesome, and in some cases almost impossible to remedy it without leaving a smear which will be observable when fired. All light tints must therefore be most carefully laid, and the outline strongly marked that one tint may not interfere with another. It is quite contrary in this respect to over-glaze painting, as if a mistake is made in porcelain a penknife will remove it, and the china be left as pure as before; but the "biscuit" absorbing so quickly any colour laid on its surface renders it a hard affair to eradicate it thoroughly. The only remedy is to dip the brush or a piece of linen rag in turpentine, and to wash the error out as quickly as possible before it has had time to dry in. The unglazed ware is easy to work on as regards the sketching of the design. A pencil or charcoal is used as easily as on paper, and any mark can be erased if desired with bread. A design can also be traced out with ordinary tracing-paper, but if an outline is required to show when the plaque is completed, it must be gone over with some ceramic colour such as man-

ganese brown, or old brown and claret-brown mixed. There are two distinct styles of painting on the biscuit or *faïence*. One method is suitable as a sort of foundation work, which can be finished after glazing with enamel colours; the other method allows of the entire painting being finished with under-glaze colours. For this kind of work one firing is usually sufficient. The former style of painting is done in flat, even tints the same as over-glaze; in the latter the colours are laid on thickly, and stand out from the background in relief. The object of flat tints being laid in under the glaze is that the colours appear softened when seen through the glaze into which the plaque is afterwards dipped. If a tint is found to be sufficiently deep when glazed, it should not be touched up after in enamel colours, but the under-glaze work allowed to remain. Backgrounds, and some flowers and leaves, can be completed entirely in under-glaze colours, but faces and figure subjects almost invariably require enamel colours to finish them. We will, however, mention how a head can be worked entire on the biscuit, although the plaque would scarcely be found satisfactory if a brilliant piece of colour is desired. The difficulty that stands in the way is the want of a bright flesh tint. Enamel colours are far more effective, and there is a much larger choice. The head being drawn in pencil or charcoal, outline the whole of it with a mixture of claret-brown and old brown. Next lay in the background of deep blue. When that is perfectly dry, wash in the flesh tints with claret-brown very thinly; then put in the shadows with a mixture of claret-brown and old brown, dabbling the edges off softly into the flesh tints. Where a greyish shadow is found a little French green may be added to the mixture, but it should then be used carefully, as greys look dark when fired. The hair, eyebrows, and eyelashes may next be laid in with claret-brown and old brown, or any colour according to copy. The eyes may next be put in with blue or brown; the lips will require a wash of cerise, and also the cheeks. When all is dry, a few finishing



touches can be added; any rough edges softened down; the hair finished off more perfectly. If it is a bright brown colour, it will be greatly improved by the addition of a little orange. The plate can then be sent to be fired, but it must not be expected to come back with brilliant flesh tints. If such are desired, the only plan is to finish it in enamel colours. We will suppose that the artist has no objection to over-glaze finishing, in which case it is better not to use any flesh under-glaze colour. Simply, after drawing the head and painting the background, put in the shadows of the face with the two browns already mentioned, the hair and eyes, and the shadows of the drapery, leaving the cheeks, lips, and all flesh colour unpainted. Send it in this condition to the kiln, and when returned finish up with enamel colours. The leaves of flowers may be completed before

glazing. Roseleaf-green and pea-green are useful colours, and different shades of green may be produced by the mixture of orange and green; orange, green, and claret-brown; but for the latter mixture, which gives an olive tint, only a little claret-brown should be used, as it is apt to act injuriously on the green, so that when fired only the brown may remain. Browns should be put on thickly, as they fire out, but the right strength for all colours can be learnt only by repeated trials. If too much medium is used, they will weaken in the fire; if used too strong, they will appear dull and heavy.

A few suggestions as to the suitable colouring of the illustrations that accompany the present paper may possibly be found useful to amateurs. A china plate having been procured, free from defects and from scratches, sketch the design in Indian ink, and then proceed to lay in the background with deep azure-blue; the serrated edges of the leaves will have to be carefully preserved. This will, perhaps, be found to be the most difficult part of the painting, but will well reward any care spent on it. Set the plate on one side until the ground is dry, and then arrange the palette with the flesh tints, and shadow colour for the face and hair—viz., light orange and salmon for the flesh tints, and flesh shadow colour which can be procured ready mixed. Olive-brown is charming for the hair, and pearl-grey will shade the muslin cap delicately, yet effectively. Now set the palette with roseleaf-green, yellow, pearl-grey, rose-colour, and brown. With these colours paint in the leaves and stems, which require many shades impossible to describe in writing, but which are well known to the lovers of wild-flowers. When it is practicable a flower should always be painted from life; the hues are so varied and exquisite that to lose but one of them is a sacrilege. Take another palette set with rose-colour and pearl-grey, also yellow and orange. Wash the roses over, shading them with pearl-grey, and put in the seeds with yellow and orange; but do not attempt to finish all the fine details. It is far better to leave them for the second painting. The plate can now be sent to be fired, and on its return it will be easy to see what parts require finishing. The lighter portions of the flesh tints may not need retouching; the shadows will probably require strengthening, and the demi-tints softening down into the local colour. The touch on the corner of the mouth and those on the nostril and eyebrow may be put in. The hair will require a few sharper lines to give a more decided form to each separate waving lock. The shadows on the cap must also be toned down; a few sharp shadow lines artistically placed give character and force to the whole painting. The leaves should next be touched up where necessary; the softened tints of the backs where visible should be especially noticed, as they add great beauty to the spray. The roses will now have to be completed, and much attention is requisite that they may appear, as far as it is possible to make them, as light and elegant as they are in nature. The seeds may be raised in white enamel, and shaded with orange and ruby, the centre shadow being of pearl-grey. The thorns will need ruby to outline them strongly on the one side, and the stems are improved with the addition of a little Vandyke brown. When all that is possible has been done to finish and beautify the painting, it must undergo a second firing.

The vase will be most effective if painted in the "impasto style"—that is, with highly raised flowers. A vase of Lambeth *faïence* should be obtained and hog's-hair tools employed for the work; the advantage gained by this method of working being the high relief into which the flowers can be wrought. Great care should be expended in giving an accurate form to each blossom. The enamel white should be used as firm as possible, that it may not spread and lose its perfect shape, and that the outline may be kept true. The white will in some cases, if used too liquid, disappear almost entirely in the firing. The entire painting is best finished at once, as much of the softened effect which is the great charm of underglaze work is lost when re-touched in enamel. Any background tint may be chosen that does not interfere with the tints of the leaves; but it is advisable when convenient to select one that will harmonise well with the predominant colours of the room in which it is intended to be placed. To insure a rich decorative effect should be the artist's aim in painting a large vase. This object should be borne in mind both in the choice of flowers and in the colours employed.

Some designs can be more easily and elaborately represented if painted in enamel; such will be found to be the case with the figure sketch of the two boys on the river bank, which forms a portion of the picture by Zuccarelli. This illustration suggests itself as a good subject for the decoration of a dessert plate. To be successfully carried out it should be painted in soft, delicate tints that harmonise in tone. The bulrushes form a beautiful background to the figures; the rocks give the requisite force; fleecy, rose-coloured and golden-tipped clouds give lightness and brilliance; while the water in the foreground enhances the beauty of the whole by the softness of effect it adds to the picture. Porcelain, with its smooth, white surface, allows of as high a finish as can be obtained in an ivory miniature; but such work is suitable only for articles that are to be seen close at hand. It is quite out of place and lost on a plaque that is to decorate a wall, or a vase that is to be viewed from a distance.

The head surrounded with daffodils may with advantage be much enlarged; it can be commenced on the biscuit, if preferred, and finished in enamel colours. The daffodils, leaves, and background can all be done in under-glaze colours, and if they do not fire out will not require retouching. The flowers will need yellow for the petals and orange for the centres; the leaves should be of a pale yellowish green. The cap on the head is white, shaded with grey, and the kerchief across the shoulders should be worked in rather roughly with thick folds, to give the appearance of a woollen material. The background may be of a rich violet, which will serve to throw up both flowers and head.

HINTS ON THE PROPER MANAGEMENT OF THE SKIN.

BY A FAMILY DOCTOR.

FOR obvious reasons I cannot, in this paper, enter into a minute description of the anatomy and physiology of the skin, interesting though it would be to many. I must refer the reader who needs or desires information on such a subject to the standard authorities.

I have before now endeavoured to explain how extremely important are the functions which the skin has to perform; how that, independent of actual and visible perspiration, an insensible transpiration or exhalation is continually going on from the surface of our bodies, and how on this account the skin is the great regulator of the animal heat; how the skin is the repository of the sense of touch and feeling, and the protector of all the parts that lie beneath it; how the amount of fluid that passes from each of our bodies during four-and-twenty hours would average about three pints, and how, in this evaporating fluid, many substances find their way to the surface of the body, which if retained in the system would act injuriously, if not indeed as positive poisons: such, for example, as the acids that cause both gout and rheumatism.

I will now try to explain to my readers the conditions which are necessary, in order to obtain so desirable a result; and I think I shall be doing right to first and foremost say a word or two about the proper nourishment of the body, for upon this to a very large extent depends the health of the skin.

We nourish our frames, then, from the food we eat. The first meal of the day, presuming one is in fair health and strength, should be, to use a common phrase, "a hearty one." Mind, I do not advise any one to eat to repletion—only pigs may do this, and they live but to eat and sleep; but man has work to perform, and no meal of the day should be a heavy one. But a person is certainly not in good health who has not a good appetite for breakfast; there must in such a case be a screw loose somewhere, and the more speedily it is seen to the better, or evil will be the result. Our forefathers drank sack for breakfast: our forefathers lived much more in the open air than we do, and so their sons and daughters must content themselves with the milder beverages, tea and coffee. And nothing can be better if they are properly made and served. IF—but alas! and alas! how seldom one gets a cup of either good tea or coffee. A word about each. Plain black tea is the best; if a fair price is paid for it, it will come far cheaper in the long run; never, after adding the water, set the tea-pot on the hob to simmer for any length of time. Here is how I advise the infusion to be prepared:—Take a silver or brown earthen tea-pot, and having heated it, put in the tea, and set it on the hob to heat and dry for about a minute without the lid, just until you can scent the aroma arising. Have the water *boiling* ere you pour it in; you may then put on the lid, and replace the tea-pot on the hob for three minutes, and no longer. It should now be drunk, else instead of an infusion you will have a decoction—instead of imbibing the good qualities of the tea alone, you will swallow also its deleterious, not to say poisonous, properties.

Brain-workers, especially literary men, often need some refreshment during their labours, and in my opinion there is nothing so grateful as coffee, drunk either cold or hot, with or without sugar and milk. Those who have to travel long journeys by train, would do well to take in their bags a bottle or two of well-made tea. There is no stimulant so exhilarating; the effects of beer or spirits on the tired body are only transient, they soon pass off, and leave one more tired and weary than before. Milk may be drunk in the coffee or tea for breakfast, but I doubt whether elderly or even middle-aged people should drink milk cold at any time; it is often most indigestible, although it may be taken in small quantities, mixed with soda-water, even by the most delicate. A patient of mine, only last week, some hours after partaking freely of cold milk was attacked by sickness and vomiting, which resisted all treatment until the third day, when relief seemed to be brought about by his bringing up a vast white cheesy mass, very much larger than he could have swallowed. Milk, I grant you, is the most nutritious aliment which we possess, but even milk must be partaken of with due consideration. Cocoa is also highly nutritious.

Dinner, I have often said, should be partaken of early by those who value their health. The luncheon of the present day is in very truth nothing else than a dinner, and, as that, it does well, but the evening meal deserves no other name than that of supper: and a very heavy and indigestible one it often is too, requiring all kinds of wines and stimulants to effect its digestion and produce subsequent sleep. No wonder that people who live in this way as a rule, and eat more stimulating food than is good for them, age before their time, and suffer from ekzema and irritation of the skin in their later years.

Let me now seriously advise any reader who may suffer, or who is apt to suffer, from skin irritation to abstain from the use of too much animal food, strong soups, or such stimulating food as goose, duck, or pork; to eat a due proportion of green vegetables as well as potatoes, and not to use either beer or spirits.

Ekzema is an ailment of the skin which is very common now-a-days in the old and middle-aged, and there is little doubt that it is very much aggravated by taking stimulants between meals. Beer especially seems to increase the trouble and inconvenience

caused by this tiresome complaint. If any stimulant is needed, claret should be used, and it need not be the most expensive either. If this disagrees, Tarragona may be tried. I earnestly urge young people to abstain entirely from drinking beer with their food, that is to say if they are at all particular about personal appearance, and wish to avoid a blotchy face and muddy complexion. And this leads me to say a word or two about a kind of acne of the face, from which ladies, either young or middle-aged, often suffer. It is commonly called the "rosy drop," and consists of red spots on the face, and even pimples which suppurate, or along with the redness there may be some thickening of the skin. It is worse after eating, especially if the person's suffering has been tired before she sat down, or has to hurry through the meal. It usually commences with simple flushing or reddening of the face—I do not mean blushing, the redness is more permanent by far than simple blushing. It goes and comes, but it cannot go and come long without causing permanent spots on the skin of the face, and after a time the redness changes to a bluish hue. Now this is a state of matters which is really very distressing, and the subject of which deserves our pity and commiseration all the more in that people so afflicted are often supposed to have brought it about through over-indulgence in stimulants. The cause is *debility*, engendered somehow. The digestion is generally weak or fickle, and this should be set to rights; bitter tonics should be taken along with some of the mineral acids, tincture of steel will also do good, and if these fail try the following, which a chemist must compound for you. I write it in English:—

Take of Fowler's solution of arsenic		half a fluid ounce.
,, the wine of iron		three fluid ounces.
,, syrup of oranges		three fluid drams.
,, distilled water		five ounces.

Mix.

The dose for an adult lady is thirty drops three times a day, with or after meals, gradually increased to a tea-spoonful. It should be taken for a fortnight, then a day or two may be slipped, and afterwards the course repeated.

About a grain of corrosive sublimate in an ounce of eau-de-Cologne may be twice a day applied to the face. Juniper tar soap should be used for matutinal ablution, and the face may be washed in the same way at night, and afterwards the benzoated ointment of zinc should be applied, to be washed off again in the morning, the water used being cold. If it does not yield to this ointment, add to each ounce of it ten grains of the iodide of sulphur.

Supper often agrees best if solid instead of sloppy; if you would avoid a heated and easily irritated skin, however, it had best be partaken of two hours before retiring for the night. Supper, too, should be moderate, and over-much fluid should not be taken.

No one can retain a really healthy skin who does not take proper and sufficient exercise. The kind of exercise depends upon a great many things, on the age among others. Boys, for instance, must romp and play, and the more wild the game they are engaged in the better. While boys play wildly let girls play merrily; have they not among other things the skipping rope, and the power and, if well, the will to dance—aye, and to sing? Parents ought in every way to encourage their children in singing; it strengthens both voice and lungs, and may even keep consumption itself at bay. Older people ought likewise to take abundant exercise, and they are never to forget that it must be of a kind capable of giving pleasure—exercise that interests them and withdraws their minds for the time entirely from all work and all worry. For adults, especially those of middle age, exercise should not be too fatiguing, or too long continued; for that *puts a strain upon the skin*, and may induce future ailments thereof.

As to clothing, its effects for good or evil upon the skin must never be overlooked. It would be a good thing for many if they would study *comfort* in clothing more and the fashions thereof less. Says Boerhaave, "Only fools and paupers suffer from cold; the latter not having money enough to buy clothes, and the former not having the sense to wear them." I mentioned the word comfort with reference to clothing, and your *feelings*, believe me, *must be your guide* as to what kind of clothing, and how much or how little to wear, whether abroad by day or in bed by night. Now, remembering that the skin is continually undergoing a change, the outer or scarf-skin constantly passing off and being replenished from the inner structures; remembering, too, how much deleterious matter, both unctuous and saline, passes through the skin, and which if not removed by washing will tend to form a pellicle which will interfere with the free action of the skin, surely I need adduce no other argument in favour of daily and complete ablution of the whole body, either in tepid or in cold water, or in both.

The skin is so important an emunctory that even the impartial performance of its functions is incompatible with healthful existence; and, to put it in plain straightforward language, whenever I meet with a being who is a stranger to the bath, I pity him in my own mind just as much as I would a creature with only one lung; neither the one nor the other can enjoy life fully.

I have come to look upon the soap bath as almost a prophylactic against skin disorders. It is so simple, too, and is the perfection of a matutinal or anteprandial bath; for it strengthens the body and exhilarates the mind, while it soothes the jaded nerves, banishes every feeling of weariness, and restores the appetite. A basin of hot water, a flesh-glove, and a piece of plain soap, with the usual morning tub and big sponge, is all that is required. The body is first thoroughly lathered and well rubbed all over. This should not occupy more than two minutes, and then the cold or tepid sponge bath is taken. And those who can stand it should use cold water rather than tepid water; the reaction and the feeling of exhilaration is more perfect after the former.

THE TROUBLE IT BROUGHT.

By C. DESPARD, Author of "The Artist and the Man," "When the Tide was High," &c.

CHAPTER THE SIXTH.



THE weeks that passed between the day when Eugene gave me this glimpse of himself, and that of our walk through the churchyard, and Nina's singular conduct, I shall always remember as some of the happiest in my life.

We three—Nina, Eugene, and I—were always together. By my brother's permission, I told her what were his hopes and aims; and she had gladly accepted him as her father's interpreter.

The day when her father should be vindicated before the world and his true genius known would, she said, be the happiest day in her life. And I, who knew something of the hearts of both, felt how deep was the meaning of her words. In fact I understood soon that, though nothing distinct had been said between them, they had reached a tacit agreement. The day of her father's success would be the day when their love should be declared. Meanwhile they resolved nobly to put away all selfish thoughts, that they might give their full energies to the grand task which they had set before them.

We pressed my old master, Mr. Dubois, into the service; and Eugene, who was already something of a musician, took lessons in harmony, while Nina and I emptied out the chests of papers which were my poor cousin's only inheritance, and endeavoured to classify and group them.

At first our efforts seemed hopeless, the mass of papers was like a tangled skein, but by patiently persevering we found first one clue and then another out of the labyrinth. Nina's magnificent musical training, and her knowledge of the laws of musical composition, served to guide us. Out of chaos order came. We thought ourselves justified, after many days' toil, in assuming that a complete work, that in all probability on which the dead musician had been ready to stake his fame, was before us.

This ended the dry part of our business, and that which was delightful began. The composition was in opera form: it required words; and, indeed, amongst my uncle's papers several librettos were found. They were not written in his own hand, and to our fastidious judgment they were not in the spirit of the music.

Here came in Eugene's work. At his suggestion we met in church on the week-day evenings, when services were not going on, and while Nina played the noble music composed by her dead father, he, seated in a distant corner, tried to saturate himself—this was his own expression—with its spirit.

It was a little singular, the spirit of the music seemed to him so entirely to harmonise with the sketch he had thrown off when the composer's life had been the subject of his thoughts, that without hesitation he chose it as the ground-work of the libretto. Evening after evening he listened, and night after night he worked. The product of one night's labour would sometimes be only a song or couplet, or the refrain of a chorus, but he made progress steadily, and every day our hopes rose.

Oh, what evenings those were! Well I remember them, when in the beautiful old village church, with deep darkness around us—for the winter days were short—we three, full of our great purpose, would meet. And sometimes the tears poured down Nina's face as she played; and sometimes her voice rose, and those were Eugene's words which she sang, and he was listening over there with bowed head and beating heart; and sometimes she stopped suddenly and caught hold of my hands—I always sat near her—and whispered—

"I see him, Mary, he is near us. Look! he is smiling as he never smiled upon me when he was alive. Now I am happy. Let us go."

And Eugene would come from his corner, and we would walk home through the dark ways, feeling our hearts large within us, and the air alive with invisible ministrants.

Yes, those were wonderful days; but they came to an end suddenly.

I should mention in passing that from the time of Nina's arrival to that of this memorable spring, I had been rather neglectful of my social duties. During the early days, Nina's mourning was my excuse. I could not take her out with me, and I would not leave her alone at home. Afterwards, her story and Eugene's, and our hopes and plans, so engrossed me that my former life, with its small cares and excitements, seemed to recede from me. I am ready now to grant that I was wrong. I should have paid my round of visits as in former days. I should have tried to persuade Nina to go out with me, and introduced her to my neighbours. Had I done so, many of the discomforts from which we afterwards suffered might have been spared us. But I was young, and had no one to advise me, and I took the course

that was, for the moment, easiest and most agreeable: I gave up visiting, and refused invitations. How could I talk the ordinary tittle-tattle which was required of me when the music of Nina's father, and Eugene's words, were sounding in my ears? It seemed impossible. Besides, the days shifted away so quickly, they were so full—full to the very brim—of work and interest. For my household cares (I had early taken taken upon me the management of my father's house) did not cease, and there were parochial matters—sick-visiting, school-inspecting, and keeping the accounts of provident and coal-clubs—which could not be neglected. I eased my conscience about my well-to-do neighbours by saying to myself that they could not possibly want me. It was necessary, moreover, for my time was well mapped out, to choose between them and the afternoons in the church, or the hours spent over my uncle's papers, and as the one occupation—the visiting—was distasteful, and seemed to my small judgment barren; and as the other was entirely to my mind, and destined, I believed, to bear fruit in great results, I let choice go with inclination.

I am not without a certain naughty spirit of contradiction, which, I must confess freely, has often served me an ill turn; and the superiority and worldly-wisdom of my two elder brothers—I hope they will forgive me, and I speak in strict self-condemnation—did, in those days of my unripe youth, more frequently than anything else excite this wicked spirit to revolt.

Now, Henry and James, like wise and not at all visionary people, perceived in those days that I was neglecting a duty, and each in his different way took me to task.

"You are dropping friends," Henry said to me, "that is unwise. People ought to take some pains to keep up their relations with the world. We cannot do without it, you know."

Henry is further removed from me than James, and I am never saucy to him. On this occasion, however, I ventured to hint that our village contained a small and not very fascinating part of the world, and gaining courage as I proceeded, I repeated some of his own phrases—they may be found in "The Touchstone"—about taking large views of things, and out of two comparatively good courses of conduct being careful to choose the best. Whereupon Henry smiled with infinite condescension.

"I am glad to see," he said, "that you try to improve your mind. But you must not be too ready to give general ideas a personal application. I write for men, not women, and even amongst men only for those of an understanding mind. Don't you see, my dear child, if every one took large views, where would be the room for the small things?"

"Plenty of room," I answered audaciously, "great ideas only present themselves to a few."

"That is not at all a bad answer," said Henry, with indulgence. "However, as I said before, beware of personal applications. Great ideas are not likely to present themselves to you at present. Look after the little things. You happen to be a girl; that is a providential arrangement with which we cannot presume to interfere. Take the woman's part; act with tact and judgment. Keep a warm place for us, as a family, in the thoughts of our neighbours."

I suppose I did not seem so struck as I should have been with the force of his words, for he asked argumentatively how it would look for James and himself to go out paying afternoon calls; and seeing I could find no answer to this pathetic appeal, he treated the question as settled. I am inclined to think that an article he published some time later, on "The Beautiful Adaptations of Nature as seen in Feminine Malleability" was written at about this time.

I did not, however, at once resume my former habit of periodical visiting, and a few days later James attacked me.

"How long is it," he asked, "since you have seen Miss Ashley?"

I answered that I had not kept the date of my last visit.

"Do you know that she is highly offended?" he further inquired.

I raised my brows to indicate indifference.

"But if you don't mind," said he, "I say you should mind. Miss Ashley is an extremely sensible woman, and a very good adviser for an inexperienced young girl like you. Besides, she is well connected. You ought not to give her up."

I replied that I never thought of giving up Miss Ashley. James insisted that I was giving her up: I was also giving up others, who were valuable as friends. He observed that he was sorry to see me so little girlish in my ideas, that instead of taking the lead, as I should have done, in this new friendship—which, he remarked parenthetically, was ridiculously enthusiastic in its character—I was allowing myself to be led. He begged dictatorially that he might hear no more of this kind of thing, and trusted, with emphasis, to my discretion and good judgment.

Was it possible—I appeal to my lady friends—that any one who possesses a naughty spirit of contradiction should not immediately be armed at all points and ready for revolt?

I know I was. The power that could move me had not spoken. My dear father always won my sympathies by the visionary element in him, the absence of that discreet worldly-mindedness that made my eldest and youngest brothers, so early in their career, successful men. Whether they spoke to him or not I cannot say. What I know is that he allowed me to take my own course, was gently benignant about my romantic devotion for Nina, and though he made no inquiries with regard to our nightly meetings in the church, I always believed he guessed their object.

There was, in these days, a particular warmth in his manner towards Eugene. He called him into his study when he was writing; he consulted him frequently on the subject of his new work—a Commentary on the Book of Job—and allowed him to see that he, for one, thoroughly believed in him. And all this made me happy, happier than I can possibly say.

The winter days wore away, and the glad spring, as I have said, returned. Our work was completed; the

daily practices in the church were no longer needed. Eugene was putting the last touches to his poem; M. Dubois was helping him in a final and most conscientious review of words and music. They had already begun to enter into correspondence with friends in London about bringing it before the world, when the event happened which, in a manner mysterious to us then, and utterly inexplicable, brought change into our lives.

And as it has to do with that scene in the churchyard which I have already described, to it I must return. I could not sleep that night, for, say what they would, I was convinced I had been duped by no illusive sound. There is a difference between the imaginary and the real, difficult to put into words, but veritably existent. I would willingly have staked my life that night upon the correctness of my inference that some source other than my own fancy, whether spiritual or human I could not attempt to determine, had given origin to the wild sound which I had taken to be a shriek. I was certain also, as certain as I could be of anything, that, for all her light words and assumed contempt for "Mary's ghost," Nina had heard the same sound, at the same moment. Why, I had felt the thrill of that tremor which convulsed her; the throbbing of her heart against my hand continued with me through the night, with almost the force of a present sensation. I made up my mind that I would not let the subject drop. Nina should confess that she had shared my illusion, if illusion it were.

I was accustomed to rise early. The little conservatory leading out from our father's study is my especial care, and I like to have my work of clipping and watering, of removing my plants and renewing them, over before he takes possession of his room for the day. Afterwards I feed the dogs, and attend to the little aviary in the verandah, which is Eugene's special delight; and, on account of these morning occupations, I am generally first up, at least in the summer.

This was such a lovely morning that, before setting to work, I felt moved to stroll round the garden. My little border was already gay with jonquils and daffodils, and anemones, brilliant in colour; in front of the drawing-room window hyacinths and tulips made a fair show; beyond, in the small orchard, was a white sheet of blossom, so pure, so radiant, that it seemed to lift me heavenwards. I felt glad, because of the gladness of nature. Standing still and looking up into the infinite azure, which spread a warm canopy over this world-loveliness of youth and spring, I offered up my morning prayer. It was nothing but thanksgiving. I was so glad to escape from the prison of night and the dull imaginations which the darkness had fostered. In this light of God's day nothing seemed terrible.

I heard the gate-latch click, and I looked round, expecting to see our old gardener. It was Nina. I ran forward to meet her, and I observed that she looked much whiter than usual; but there was a smile on her lips, and her eyes, though weary and encircled with dark rings, had an expression in them of deep contentment.

I linked my arm in hers, and said I was surprised to see her out so early. She answered that she could not sleep much: she had been to the church, she said, practising. I asked how she had got hold of the keys so early.

"I stole them last night," she replied, with a roguish smile. And she added, holding up a large key which was an old friend of mine, "I stole something else too."

"The key of the store-cupboard. Oh, Nina! where did you find it?"

"In the usual place, Mary. Don't look so frightened, dear. I went to find it purposely. I felt hungry this morning."

"Oh! if that is all. But there are always biscuits in the sideboard, and bread in the larder, and butter and milk in the dairy."

"None of these would satisfy me. I wanted raisins, and jam, and sardines."

"Raisins, and jam, and sardines!" I looked at Nina in astonishment. Her colour rose.

"Do you object to my taking what I want from your stores, Mary?" she asked: the tone of her voice showed that she was on the verge of being offended. There had never yet been the shadow of a disagreement between us. I did not intend to begin to quarrel about things so trifling as jam and sardines. I begged her to take whatever she pleased out of the cupboard, and she thanked me with her sweetest smile.

"And now will you let me help you, Mary?" she said. "It strikes me sometimes that I am taking everything and giving nothing. You are so good to me, and I——"

"Don't you know what you are doing, Nina?" I said, looking into her eyes.

"Very little, I am afraid," she answered.

"It is the unconscious work that often tells the most. You have brightened our father's life, Nina; you have given Eugene fresh hope and energy."

The tears filled her eyes as she murmured of her gladness; but almost immediately after—it seemed so strange a transition—she said, *apropos* of nothing as it seemed—

"Will you let me keep this key for a few days?"

"If you give it to me at the proper times," I answered; and then—Nina was not at all a gourmand: she ate daintily, like a bird that sips here and there among the blossoms, and it struck me as curious that she should be so anxious to possess the store-room key—"Nina," I said suddenly, "you did not take those things out to-day for yourself—come, confess."

She turned as pale as ashes: she looked absolutely frightened. "Because, darling," I went on mildly, "if you want to give away, you ought to consult us. One *must* use discretion. I could not keep the house going if I were to give to all who ask. Nina, what is the matter with you this morning? I never knew you so easily offended."

She answered in a choked voice, "I am not very well—that is—now do not go and tell Uncle Richard—I have a slight headache, and your unkind suspicions——"

"Suspicions! Nina!"

She cried out, "Take your key—I will find what I want elsewhere."

And she turned away. But her face was so pale and heart-broken that it made me really concerned. I ran after her, and forced the key into her hand. She smiled sadly into my perplexed face.

"Say it is a wilful fancy," she murmured. "I am very wilful sometimes. But thank you for trusting me; I wanted to be sure that you did."

I thought she had chosen a most singular test; but, seeing she felt so strongly, I would say no more upon the subject.

We went about our tasks together, and that morning I had a second key made for my store-room, so that I might never have any necessity to ask Nina for the one I had given to her. But the affair perplexed me.

CHAPTER THE SEVENTH.

THAT was only the beginning of troubles. It became evident to me, before many more days had passed over our heads, that to our Nina some singular change had come.

The light-heartedness which was natural to her, as it had been to her mother, my aunt Laura, and which in our life together, full of pleasure and hope, had begun to return, departed suddenly. She became grave and earnest. She seldom smiled; she, the brave high-spirited girl, whom I had envied for her courage and address, trembled like an aspen-leaf, and turned white as burnt-out ashes, if any one spoke to her abruptly; she went about as if some heavy burden of woeful perplexity, of which she longed to rid herself, but could not, were hanging about her neck.

But this was not all, else I should have attributed the change to failure in her health, and entreated my father to force her to see a doctor; but there was a still more striking alteration in Nina's habits, and this no doctor, no one but herself, could explain.

To me it was exceedingly painful, for I had begun to rely upon her society as a part of my daily life. Now she was scarcely with me at all. She left the house shortly after breakfast, as a rule, making some excuse—to practise in the church; to visit an old woman; to find a rare flower on the common—and she never stayed away less than two hours. She always chose the time when I was busy in the kitchen, giving orders for the day; and when I begged her one day to wait a few minutes and take me with her, she replied bluntly that she liked solitude. It is true that, later in the day, she tried to tone down this abrupt refusal by saying she had been in a hurry, and dilating, in the poetical language which she can use so well, on the desire that arises in us sometimes to be alone with nature. I still failed to understand her. But another and still stranger habit grew upon her, and this it was which caused me to connect the change in her with that evening when, from the Old House in the Churchyard, those mysterious sounds had come. She was inspired, all at once, with a romantic attachment for the Old House and garden. "I have found a way in," she told me one day. "No, no," when I questioned her, "it is a secret—a deep, dead secret. I am privileged, Mary, like the fairies' favourites in our old nursery-tales. If I told a single person —one—the privilege would be taken away for ever, and I should be forced to wander all my life, like a lost creature, outside the gates of my Paradise."

This she told me late one afternoon, when I had met her at our front gate, with a small basket on her arm, and in answer to my inquiries she had confessed that she was on the way to the Old House.

"You don't like ghosts, Mary," she said—"I do: we have afternoon tea together, and they tell me strange stories, which I mean to write down some day."

Her lightness, which I knew to be assumed, yet cut me to the quick. Why should my cousin and friend, whom I loved so dearly, cover her true self from me with all these veils of mystery? The tears started to my eyes.

"I should like very much to go with you this afternoon, Nina," I said.

There came an angry light into her eyes. She misinterpreted me: she thought I wished to watch her. What, I thought, with a miserable despondency that almost choked me, could have made Nina so suspicious? "Come then," she said, "only"—with an odd smile that did not please me—"don't expect to see anything: don't expect anything to happen. You might hear sounds you would not like."

I stood trembling. Her bitter words went to my heart.

"Are you coming?" she said. "Please decide at once."

I answered that I would not come, and turned sadly towards the house. Eugene was sitting in the verandah with a book. He saw that something was wrong, and called me.

"Come here and sit down, if you can spare the time," he said. "What is the matter with you?"

"Oh, Eugene!" I cried out, "what is the matter with her?"

His smile was reassuring.

"You are not surely fretting about Nina?" he said.

"She has become so mysterious lately."

"Did she not ask us to trust her?"

"Then you think——"

"I think nothing; I believe in her. You must do the same, Mary, if you wish to prove her true friend."

"I am her friend. I love her with all my heart."

"Love without confidence——"

"We have known her so short a time, Eugene."

"But we know her."

I looked up at him sharply. I said, "I believe she has told you her secret."

There was a sweet serenity about Eugene's smile which, in the disturbed state of my heart, impressed me deeply.

"Has she a secret?" he said. "I did not know it. If she has, I know there is a reason for its being kept from us."

"That may be; still, if she looks upon us as friends——"

"Listen to me, Mary," said my brother. "We have each our character, just as the trees have their forms, and the flowers their particular textures and colours. Everything follows the law of its own being. If I were to expect a dandelion to smell like a rose, or a rose to send out plumed seeds like the dandelion, I should be expecting a miracle. Knowing what we have to expect from things keeps us from making absurd mistakes. It is the same in human life. Do you understand my parable?"

I hung my head; I felt ashamed.

Dubois, and Colonel and Mrs. Green were dining with us; and during dinner, I remember, the talk fell upon the Old House which Nina loved. "To whom does it belong?" Miss Ashley asked of my father. He answered that he was told it had passed into new hands lately; it was more than likely it would be pulled down and rebuilt. Did he know the name of the new owner? He did not. Colonel Green and Mr. Dubois were also ignorant. There was a division between us. The practical members of our party, headed by Miss Ashley and comprehending Henry and James, were



"NINA PLAYED THE NOBLE MUSIC COMPOSED BY HER FATHER" (*p.* 161).

"From the sweet we can only expect sweetness," I answered, applying his lesson; but I added, remembering some of James's aphorisms, "You will not deny that we are sometimes disappointed in people."

"As we are in things. Disappointment is the result of imperfect knowledge."

"Your knowledge is perfect."

"That would be saying too much. It is correctly grounded."

I left him, and went in-doors with a lighter heart, for his firmness and simple trust had strengthened me. I was even able so far to conquer myself as to meet Nina that evening without a trace of the annoyance her singular conduct had caused me, and I was rewarded by seeing her face light up with one of those radiant smiles which came but seldom now.

It was one of our guest-nights. Miss Ashley, Mr.

loud in hope that the old eye-sore would be removed. The unpractical amongst us (I, of course, was the most vehement), reinforced, I am proud to say, by my father, deprecated the idea of its destruction, thought it was a pity old land-marks should be done away with, and had visions (for we were taxed with a sentimental desire to preserve what was useless) of the old place being made habitable, but allowed to retain its characteristic features.

Miss Ashley, in a way that I thought marked, appealed to Nina, who professed herself neutral. She was taxed by Colonel Green with a particular fondness for the old building. My father, who had been talking music with Mr. Dubois, interposed in explanation—

"It is perfectly natural; my niece has heard stories about the Old House."

"I remember," Miss Ashley said, "you and your

sister made a playground of it in the old days. It was talked about then."

"Where is the old building," my father said, "that is not talked about?"

Mrs. Green, who was a sentimental old lady, professed fondness for old houses.

"They are so romantic," she said. "Ah!" smiling at me, "you young people of the present day are not nearly so romantic as we were."

"But some of them are," interposed Miss Ashley; "I have been hearing stories."

Colonel Green pricked up his ears, presenting very much the appearance of a wiry old Scotch terrier that has caught the pleasant sound of rattling dishes.

"Stories!" he echoed.

"The colonel does so love a new story," said the colonel's wife innocently.

"But nothing new ever goes on here," ejaculated James.

Several pairs of eyes were turned in Miss Ashley's direction.

"After all," said Eugene, "it's only a question of terms; there is nothing new under the sun. Whoever heard a perfectly original joke?"

"Or," said I, taking up his cue, "a story that has not been heard a myriad times before?"

"That is all very well as far as it goes," said Henry.

I pressed him to be explicit. He had the faculty of speaking lengthily when he thought it worth his while to enter on a subject.

Miss Ashley made an effort to be heard.

"You think—?" Eugene appealed to Henry.

"If stories are few," he answered, "the region they have to travel before they can be heard by all, or indeed by a number something short of all, is immense. A story may be old as regards the world in general, it may be new to us."

"And that reminds me," said the colonel, forgetting, in his anxiety to put in an apposite word, his anxiety to hear a new story.

Eugene and I looked at him hopefully.

"I met an old friend the other day," he proceeded (Miss Ashley sighed; over Nina's sweet face came a delicate colour, and her eyes shone with merriment)—"first-rate fellow; good-natured, amiable, and so forth, but with one fault. He dearly loves the sound of his own voice, and as he has not much to say, one soon gets to the end of him, then he becomes a bore—naturally. A story once told may be excellent, a story twice told is tedious."

He paused. Miss Ashley made a spasmodic allusion to her story, which she was ready to assure the table had not its match for novelty and interest. But the colonel, once launched on an appropriate theme, was not to be baulked of his determination to carry it through. I moreover kept my eyes fixed on him with expectation.

"But on this occasion," he went on, bowing apologetically across the table to Miss Ashley, "my old friend brought in his pocket a story he had never told before. My nephew was staying with me at the time—fine young fellow, fresh from Sandhurst. You know him, Miss Winstanley—by appearance, at least?"

Young Horace Green was, as I knew, the old colonel's pride. Feeling warm and friendly towards him for his interposition in our favour, I answered with enthusiasm—

"Oh! yes; I know him. Every one about here must know him—a handsome lad, with fair hair and blue eyes; the true Saxon type."

"And such a pair of shoulders," put in Mrs. Green. "Oh! I *hope* you have noticed his shoulders. He is *almost* as broad across the chest as his uncle."

"My dear," said her husband reproachfully, "this is a digression. Horace has good shoulders, I will not deny it; but what have they to do with my friend's tale?"

Her deprecating eyes seemed to remind him of the fact that, if digression there were, it was started by himself; being a wise old lady, however, who avoided marital discussion in public, she said nothing; and, conciliated by her reticence, the colonel again sought my eye, which, as it had in the meantime verified my suspicion that Miss Ashley showed signs of restlessness, was very much at his disposal.

"As I was saying, Miss Winstanley, my nephew was present. We sat down to dinner together, a little party of four. My friend is a military man; his experiences outside the service are of a very limited order. I happen to know him pretty well, and I had guessed by the unusual cheerfulness of his expression that he had brought us something new."

"The colonel's power of reading faces," put in his wife, "is really extraordinary."

"It is a great gift," said Eugene, her next neighbour.

"And of especial service to a man called upon to command others," added Henry.

The colonel looked from one speaker to the other, smiling good-naturedly. This digression was not entirely displeasing to him.

"But," said Miss Ashley, with an impatience she could not repress, "where is the story?"

"We are coming to it," replied the colonel. "My old friend's story, that is to say, I do not propose to inflict on you. It had reference to an occurrence in the Crimea, not bad in its way, though by no means new. Kinglake gives it in another form. My friend, who has a curious way of mixing up things in his mind, represents himself as a principal actor—yes, and he believes he was, believes it firmly. It is a singular instance of mental hallucination."

Of course the chances offered by this long word of delicious vagueness could not be allowed to slip by those who were anxious to draw out this happy interlude of the colonel's and spread it conversationally over the whole period of dinner.

My father was induced to give his opinion on hallucination: the meaning of the word had to be explained to M. Dubois, and Henry was betrayed into quoting with accuracy and circumlocution Maudsley, himself, and several other learned writers who had given to the world their opinions on the subject. We nearly overreached ourselves upon this occasion, how-

ever, for the word afforded Miss Ashley dangerous openings, and I was compelled to show my hand more clearly than I had intended by the crude device of reminding the old colonel that his story was left unfinished.

"I was not allowed to reach my point," he said, drowning Henry's slower utterances, and once more detaining the attention of the table. "But I will come to it in time. My friend entered upon his story. I listened languidly, my wife, with that amiable consideration she always bestows on my guests——" Mrs. Green tried to say that she was really interested and to offer some intermediate details. The dessert was in full progress now, and I breathed more freely. The colonel held gallantly on his course—"It is awkward to look persistently at a person when he is speaking at any length. I was not too deeply interested in my friend's relation to feel this awkwardness. I turned, without any particular intention, to the side of the table where my nephew was sitting, and my word! I had a lesson then about the relative values of stories. There was no thought of awkwardness about him. His eyes were fixed, his mouth was open; he was drinking in the tale with a child's eagerness. You see it was as new to him as if it had never been heard before."

"And so," said Mrs. Green, "the colonel gave our friend the lead, and we spent quite a delightful evening over military memories."

"Is it not well," said M. Dubois, commenting upon this happy conclusion, "that there is about us a young world loving novelty?"

"And finding it," said my father, "in what we call dulness?"

Wherewith Henry made some learned remarks, which I cannot recall, about the world when it was young, and the peculiar freshness and beauty of the beginnings of history, which sent Eugene and my father to their beloved old Greeks, and so the ball was kept rolling, allowing to poor Miss Ashley no smallest opening for the relation of her interesting tale, until the moment when I felt I could decently give the signal for the ladies to rise from the table.

CHAPTER THE EIGHTH.

"SHOULD you mind giving us a little music presently?" I whispered to Nina, as we were on our way from dining to drawing-room. I was acting in obedience to a parting glance from Eugene, which I had interpreted as an entreaty that I would not allow her to be teased.

She nodded her head in assent, and upon Miss Ashley taking a seat near her in a determined way, I made my request openly.

"Nina, dear, a little music would be delightful. Will you gratify us?"

"Should you like a song?" she answered, moving towards the piano.

"Oh! yes; pray sing to us. There is no instrument half so charming as the human voice," said Mrs. Green.

An old English ballad, exquisitely rendered, kept us all quiet for a few minutes, and I was thankful for the interval. It gave me time to think. I should explain that I had taken part in the little game at dinner on account of a repugnance in Nina to speak of her beloved haunt, which might have been merely imagined by myself, and in obedience to a hint from Eugene, which was not certainly imagined. I know him too well to be mistaken about his wishes. But I was, none the less, puzzled.

What was the source of Nina's feeling? and was there between her and Eugene any understanding that did not include me? I am afraid I must confess that, as this idea crossed my mind, an unworthy feeling stung me. It was not exactly jealousy, but it resembled it. They might, I thought, have made me their confidant. They could have been perfectly certain that I should not betray them. Besides, it was so unpleasant to be kept in the dark. We can with ease be prudent when we are conscious of possessing superior knowledge. Then there are both merit and dignity in reticence. But to be cross-examined about the doings of those nearest to you, and to be compelled to say frankly that you are as much in the dark as is the stranger who questions you, this is what few women like.

And I was not one of the few. When Nina's voice dropped, and she fell into that lovely thought-wandering on the piano which, though charming to those who love music, does not arrest the attention of the ordinary listener, and when, under cover of the continued sound, Miss Ashley turned to me and said, in a low voice, "What does it all mean, Mary? Is there anything new going on? Why was I not allowed to speak at dinner?" I felt a little confused.

But Mrs. Green came happily to my rescue.

"How nicely your cousin plays!" she said. "I like that easy style. I do wish some of my nieces could hear her."

"Nina's talent is inherited," Miss Ashley said; and she added, sighing, "I hope it may not become a snare to her."

I felt my colour rise. Mrs. Green remarked that she did not see how that could be; a talent was a gift, and Providence did not bestow gifts without good purpose.

"Purposes may be mistaken, and gifts perverted," Miss Ashley said, making me so indignant that I could scarcely keep my seat; but my feeling was changed by a sudden change in the conversation. Miss Ashley was addressing herself to Mrs. Green. "I suppose you have heard the rumour in the village?" she asked.

"No: what is it—some one engaged?"

"Nothing so commonplace."

"Some one ruined?" I suggested with a poor attempt to be satirical. The music swelled out at the moment, and I thought of that scene in the church when Nina's father, the organist, had forgotten himself over his beloved instrument.

Miss Ashley smiled on me. "No, Mary, you must try again; but I believe you could easily guess. I am not quite so sure that, innocent as you look, you may not be at the heart of the mystery."

"Mystery!" echoed Mrs. Green and I together, she growing pink with excitement, and I fighting desperately for quietness and composure.

Mrs. Green explained that she loved mysteries. There was something, she said, about the very word which was exciting, and she entreated Miss Ashley not to keep us in suspense—"Though," turning to me benevolently, "if you can open it out at once, Mary——"

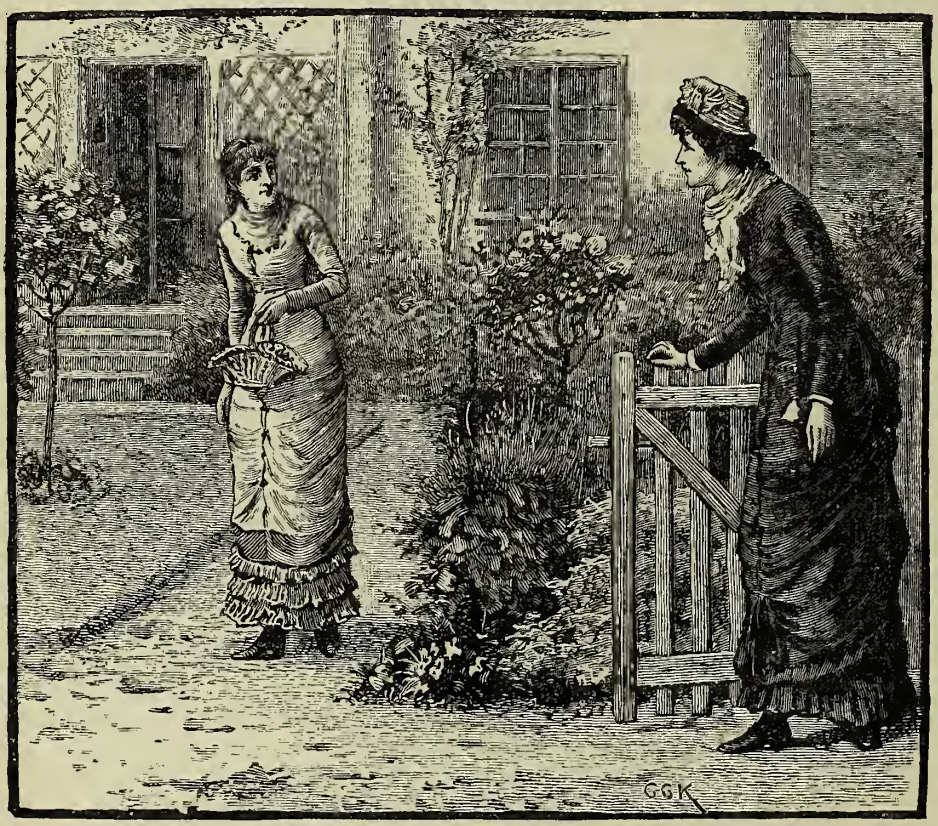
"Ability and will," said Miss Ashley sententiously, "do not always go together; however, in all seriousness, Mary, I think it a pity that you, as the rector's daughter, should allow this kind of thing to go on. When people of a certain class get superstitious ideas into their heads, it is exceedingly difficult to eradicate them."

Mrs. Green here began to look so thoroughly helpless in her bewilderment that Miss Ashley thought it well to explain. "The old ghost story has been raked up, Mrs. Green—about the House in the Churchyard: you remember people used to say it was haunted."

Nina had been playing softly for the last few moments; as the word "haunted" fell from Miss Ashley's lips she lifted her hands from the piano and turned round. What made our loquacious guest pause I cannot tell. Possibly a look in Nina's face recalled some of her past experiences; but pause she did, and my cousin's full voice was heard—

"It is haunted still; tell the people that, and, if they do not believe you, say one is here who has seen the ghosts—yes, and who sees them every day and every night."

Her face had not flushed like mine. It was pale and perfectly serene. She rose from her seat: there was a smile about her lips, and in her dark eyes a grave look that seemed to my fancy to contradict the smile. No one answered her. I could not. Mrs. Green was taken by surprise. Miss Ashley seemed to wish to express dissatisfaction, but not to be certain about the form in which she should clothe it. During the silence Nina walked quietly across the room, and went out by the French window, which was open, into the garden. Then my guests recovered the use of their speech-organs. "A curious girl!" "What can she mean?" "Really it makes one feel quite strange!" "And she spoke as if she meant it. Do you think she has seen anything?"



"I HEARD THE GATE-LATCH CLICK, AND I LOOKED ROUND . . . IT WAS NINA" (*p.* 163).

These remarks and others of a like nature were rapidly interchanged. I remained silent, gazing out into the darkness, gazing after my cousin, whose white dress I could still dimly trace, but only for awhile. As I was watching she disappeared in the distance, and I heard Miss Ashley's voice in my ear, asking if I was dreaming, and if I too believed in ghosts and saw them, and demonstrating the folly of such beliefs, with a side-hit at the people who were so foolish or so wicked as to awaken old superstitions, and set the minds of others wandering, for their own amusement

or profit. And at first (so fully occupied was my brain with new thoughts and strange suspicions) the sound of her continued speech was like a buzzing in my ear; but there was that in her form of expressing herself which awakened me presently. I was like one stung into sudden life.

"I wish you would tell me exactly what you mean?" I cried out.

Miss Ashley put on her inquisitorial look. "You have no idea, Mary?"

"Not the slightest in the world."

"Then your cousin is acting alone?"

"Why," I said, for I felt a little desperate, "should my cousin's actions be made food for gossip in the village?"

"No one who acts naturally will ever be talked about. If people will do foolish things, go out at all hours, spend their time in deserted buildings, and try to revive old superstitions—" she paused, probably for dramatic effect, and I asked, with an attempt to look innocent, who had been committing all these indiscretions.

Kind little Mrs. Green appeared much concerned. "Oh! I hope," she said, "your dear father has not made a mistake; girls brought up on the Continent are so seldom truthful."

I turned round upon her almost savagely. "My cousin Nina, Mrs. Green, is the soul of honour. A truer nature than hers never existed."

"Yes, yes, dear child. Forgive me—of course—it is pretty to see you so fond of one another," the tender old lady ejaculated hurriedly, "only, you know, people may be mistaken—now don't be angry with me, like a darling. I have known you since you were that high," indicating a point very close to the ground, "and naturally I take more interest in you than in a stranger. However"—Miss Ashley was smiling: she had not so tender a heart as Mrs. Green, and the incredulous, satirical nature of her neighbour's smile seemed, on my behalf, to wound the gentle old lady—"we need not pursue the subject," she went on; "Mary is proverbial for her good sense: she has a kind father and two wise brothers: they will take care of her."

This was addressed to Miss Ashley, who murmured in return some of the old-womanly platitudes about men's blindness: she intimated, however, her determination to say not another word. If people would not be warned the consequences must be on their own heads. After that she threw herself back in her chair, and shut up her lips tightly. Then, with nervous hesitation, Mrs. Green entered upon another subject. The great cricket match of the year was impending. Her Horace was captain of our club eleven, and she proposed to give, in his honour, tea and refreshments upon the ground in the afternoon; and, in the evening, dinner at their house, which was close by, with an evening party later. A marquee was to come down from London, and be erected in the garden, which was to be brilliantly illuminated, and all the young people in the neighbourhood were to be invited. My cousin and I would receive invitations in due form; but she mentioned the matter beforehand in case of disappointment.

"You must both be sure to come," she said.

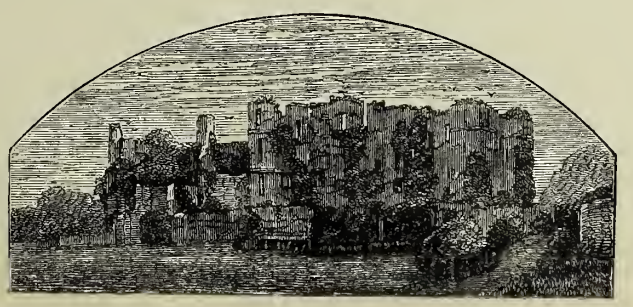
I answered for myself with a ready assent, and I believed I might almost undertake to promise for my cousin, who was beginning to go out a little.

"And she must be a spectator at the match," said the old lady; "tell her that our side will play with more spirit. Do you know that half the boys in the neighbourhood are in love with your cousin? My Horace, who has not so much as spoken to her, is her devoted admirer. It is really amusing. He said to me the other day, 'I do believe she is perfect, aunt;' and he has spent hours upon hours, and wasted all the paper he can lay hands upon, in despairing efforts to draw her portrait."

Miss Ashley here made some half-complimentary remark that I felt inclined to resent, about Nina being admirably suited for a queen of revels. "Such revels as we have here," she explained, in answer, I suppose, to an indignant glance from me: "cricket, and dinner and garden parties. But here come the gentlemen. Mr. James, we have just been talking about your cousin, who grew tired of the ladies, and left us abruptly."

"After charming us with a delicious song," added Mrs. Green. James had come first into the drawing-room. He was immediately followed by Eugene, who, catching Miss Ashley's words, said that Nina was fond of the open air. "And no wonder!" he went on, crossing as he spoke to the open window, "it is a lovely night. Come, Mary, I am sure Miss Ashley will excuse you; shall we stroll out and bring Nina back?" "Oh, certainly! by all means, and do ask her for another song," came from both the ladies simultaneously. But Miss Ashley said low in my ear, "I hope you may find her, Mary."

END OF CHAPTER THE EIGHTH.



TECHNICAL EDUCATION AND THE CITY GUILDS.

BY J. MUNRO, C.E.

IT is now generally recognised that the skill and education of our artisans is far below what it ought to be if British industries are to continue to compete successfully with those of foreign nations. Since the Great Exhibition of 1851, when our pride in English iron-work was somewhat humiliated by the display from other countries, there has been a growing fear that English manufacturers were losing ground, and recent events have only too well justified it. The girders for the new Tay Bridge are, it is said, being hammered now in Herr Krupp's factory at Essen, and it is not improbable that the raw material for these girders has been mined in Scotland, within fifty miles of where the bridge will be put up. Now it is clear that if the metal can be dug almost on the spot where it is going to be used, and yet money can be saved by sending it all the way to Prussia to be forged and hammered, there must be some unprofitable ignorance and want of science on the part of our iron-makers. But iron is not the only ware it pays to manufacture out of England. The benzine which forms the basis of our aniline dyes is made in Paris out of raw material sent from home, and many other instances of the like needless traffic could be mentioned. Moreover, whole industries have left our shores, and markets which were once peculiarly our own have been transplanted to the Continent and the United States. The silk looms of Spitalfields are roaring now in Lyons, and the Clerkenwell watch may, it is threatened, give place to the American timepiece. Sewing machines, type-writers, telephones, and a thousand ingenious novelties useful in the household, which might have sprung from English heads and been shaped by English hands, are sent to us from the United States, and we are glad to get them at the price.

The cause of this unsatisfactory state of affairs, no doubt, lies partly in the onerous terms of the British Patent Law, which constitute a heavy tax on the brains of our inventors, and seriously handicap many a poor mechanical genius. In the United Kingdom a patent protecting an invention from piracy for the short space of three years can only be obtained for £25 ; in America it can be procured for £5, a sum which the ordinary artisan need have little difficulty in accumulating. Happily there are signs that the existing British terms for a patent will before long be considerably reduced. Nor is it likely that the Imperial Exchequer will suffer by the change, for the greater number of patents taken out will probably make up for the smaller fee.

There is, however, a cause for our industrial backwardness residing deeper than the regulations of the Patent Law, and affecting not only the productiveness of the brain, but likewise the cunning of the fingers. Our artisans are, as a rule, ignorant of the scientific principles of their work, and being thus deprived of all intelligent interest in it, they become either careless or clumsy in the execution of it. The old system of seven years' apprenticeship taught a workman to know his art, if not very scientifically, at least by rote or "rule of thumb." But the invasion of steam-power and new machines has broken the old plan up, and there is yet no good substitute. At present a young apprentice is generally put into some corner of the workshop to tend a lathe, which goes on day after day, month after month, turning out screws, let us say, and the boy's duty is simply to look on and feed it. He is placed under the eye of some workman, almost as ignorant of general work as himself, or, at any rate, so busy with his own particular job that he has little time to teach the lad anything beyond his daily task. Thus the boy grows up a true "mechanic," not much better than the lathe itself from an industrial point of view. What positive interest, it may well be asked, can such a youth take in his business? A capable boy, with his heart in his work, wishes to know all its mysteries, if any one will tell him, and by a proper training even an indifferent apprentice can be brought to like his trade ; but what chance was there for either under the old system?

The obvious and fundamental remedy for this state of matters is to educate the apprentice in the elements of natural science, and especially their application to the trade he follows, so that he may intelligently teach himself the methods and the meaning of his business. The principles of science are now so widely applied not only to the processes of manufacture, but to the tools used in the processes, that a knowledge of them is now essential to the artisan, if he is to remain a valuable servant. There could hardly be a more wasteful and short-sighted system than the present, for it allows the workman to degenerate into a piece of apparatus, and condemns his faculties of mind to stay unused.

The recent extraordinary demand for text-books of science and "technical educators"* in this country is a proof that artisans naturally revolt from this mechanical bondage, and crave an intellectual knowledge of their work. They have taken in hand their own education, and by the help of these popular treatises many thousands have themselves acquired the information they desire. Properly interpreted, however, the movement indicates that the time is come when a great national organisation should undertake the techical education of the country, by colleges, schools, and classes, as well as regular examinations on the results of private study. Such a movement has at

* Messrs. Cassell, Petter, Galpin & Co. have sold over 200,000 copies of their "Technical Educator" since it was issued.

length been fairly started in the metropolis, and promises in time to spread its agencies throughout the whole country.

The Government has rightly charged itself with the duty of fostering elementary instruction in general science, by means of the Science and Art Department of South Kensington, and the benefits have already been considerable. It has, besides, remained for the City and Guilds of London Institute to see after the systematic technical education of the people ; and it is not out of keeping that the wealthy corporations which were wont to guard the "arts and mysteries" of the ancient system should undertake the conduct of the new. The leading ways in which this could best be done were first suggested in a report to the General Committee of certain of the Livery Companies in 1878, and consisted in the foundation of a Central Institute for Technical Education, the establishment of Trade Schools in London and the provinces, technological examinations of private students, and grants of money to assist existing educational institutions.

Since then the principal Livery Companies and the Corporation of London have united into a great association for the furtherance of these objects. The Board of Governors consists of 146 members, drawn from the Corporation, and the Mercers', Drapers', Fishmongers', Goldsmiths', Salters', Ironmongers', Clothworkers', Dyers', Leathersellers', Pewterers', Armourers' and Braziers', Carpenters', Cordwainers', Coopers', Plasterers', and Needlemakers' Companies. At one time all the members of these civic guilds were masters of the particular craft they cherished ; but it is so no longer, and it is nothing out of place to find a fashionable poet under the banner of the Fishmongers, or an astute lawyer amongst the Salters. In the Board of Governors there are many gentlemen of scientific tastes and culture, who must have the cause of technical education warmly at heart ; moreover they will be assisted in their deliberations by experts from the learned societies, for it has, we understand, been decided to admit the Presidents of the Royal Society, the Institute of Civil Engineers, the Chemical Society, and the Chairman of the Council of the Society of Arts, as *ex-officio* members of the Board.

It was to be expected that, in founding a great system like this, considerable hesitancy and delay should occur from uncertainty as to the proper method of procedure, if from nothing else ; but there appears to be no longer any question that the City Companies are fully alive to the national importance of the work they have begun, and earnestly determined to carry it out on a generous and successful scale. A fair commencement has been made, and a national scheme for the technical enlightenment of our artisans, tradesmen, and manufacturers will be realised ere many years have passed.

All the suggestions of the original report have been adopted ; grants of money have been given to the Birkbeck Institution, the Society for Promoting the Employment of Women, and other institutions ; Professorships in University College and King's College have been endowed ; the technological examinations which were formerly held under the auspices of the Society of Arts have been taken over, and the system extended and modified. Technical art and science classes have been started in London, and the preliminaries have been arranged for the erection of a Central Institute.

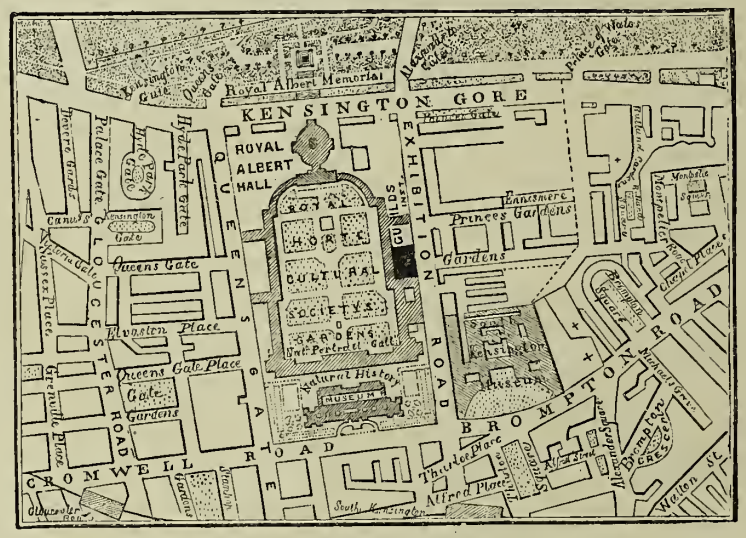
The technological examinations are carried out at any place where a class for instruction has been taught, and a "local committee" formed to undertake the examination. The subjects are very miscellaneous and comprehensive—for instance, alkali manufacture, practical blow-pipe analysis, brewing, cloth manufacture, wool-dyeing, electro-metallurgy, gas manufacture, lace, iron, and glass manufacture, photography, watch-making, tanning, telegraphy, paper-making, printing, &c. The examination is at present held yearly, and is divided into three grades, namely, Honours, Advanced, and Elementary. The first grade is chiefly intended for foremen over-lookers, the second for journeymen, and the third for apprentices ; and first and second class certificates will be awarded in each grade. Any person desiring to be examined may present himself ; but before he can take a Certificate in Technology he will be required to have passed the Science and Art Department Examination in certain Science subjects. This is, we think, a wise regulation, in so far as it will compel students to previously prepare themselves for the Technological examination by passing the South Kensington one, and thus tend to make the passage from the Board school onward more complete ; but, on the other hand, it will probably debar a great many adult artisans from attempting the Technological examinations at all, because they have not previously gained the Science and Art certificate. Grants to teachers will be given by the City Guilds on the results of the examination, after the fashion of the South Kensington Department, and prizes of money, accompanied by medals, will be awarded to successful pupils. Full particulars of these arrangements are given in the official Programme of the City and Guilds Technological Examinations for 1880. During the year as many as fifty-six classes were established at thirty-eight centres, and over 1,300 students were examined. At present there is a great lack of duly-qualified teachers to conduct the classes, but it is hoped that this deficiency will be supplied by the high-class training which will be available in future at the Central Institute.

The cause of Art has been promoted by the City Guilds in establishing additional classes at the Lambeth Art School. Special instruction in wood-cutting, and other artistic occupation suitable to females, is given there to women. At the same school there are also classes where both male and female students are taught modelling in plaster, pottery, and silver, casting in bronze, fine art sculpture, cameo-cutting, and so on. A far more important advance has, however, been the establishment of Technical Science classes at the Middle Class Corporation Schools in Cowper Street, Finsbury. These classes are designed for the express purpose of teaching the application of physical

science to the arts and industries by means of actual apparatus, experiment, and direct observation. They constitute the pioneer of a great number of similar technical schools to be founded not only in different parts of London and its suburbs, but in all the large provincial towns.

In November, 1879, two courses of lectures with laboratory practice were begun at Cowper Street. One course was dedicated to applied physics and mechanics, and was conducted by Professor W. E. Ayrton, late of the Japan Imperial Engineering College; the other course treated of applied chemistry, and was directed by Professor Armstrong. Over a hundred artisans joined these classes, which were held in the evening, notwithstanding the relatively high fee of five shillings for each course. Latterly the City and Guilds have reduced the evening class rates to half this amount, and the result has been a considerable increase in the number of students. These evening classes were continued after the new year, and day classes were established in May to meet the opportunities of persons already partially engaged or intending to engage in the manufacturing industries. The object of these day classes is to afford such preliminary training as is necessary for those who may desire, later on, to study particular branches of applied chemistry or physics, for which special accommodation will be provided in new buildings to be erected in the playground behind the schools. The students at the evening classes are of very diverse occupations: some are bankers, builders, Civil Service clerks, druggists, brush-makers, carpenters, watch-makers; others are photographers, teachers, pianoforte-makers, telegraph engineers, and fire-hose makers. They have manifested a great deal of interest in the lectures, and the classes must be considered a success. The day classes are more especially adapted to youths who have left the primary schools, but have not yet begun to learn their trade or business, than to artisans at work all day. When they have passed through these preliminary courses with laboratory practice, they may either be apprenticed to their trade, and thenceforward attend the evening courses, or they may pursue their theoretical grounding still further by attending the special courses of instruction on particular industries, to be given later on in the laboratories which are about to be erected. These day and evening classes (with associated laboratory work) will be carried on during May, June, and July, October, November, and December of each year, and there will also be special tutorial courses in electrical engineering and photographic chemistry. At the close of every session, a professor's certificate and prize are awarded to the student showing highest merit in each class and laboratory course. The fees are very low, comparatively speaking, for all the courses, and it is satisfactory to learn that between three and four hundred students took advantage of the summer courses.

To provide for the extension of these technical classes at Cowper Street, the basement floor and lecture theatre of the schools have been leased, and ground secured in the area behind for the sites of new physical and chemical laboratories. It is also proposed to build a special laboratory for the study of applied mechanics, and doubtless other sciences will in time be taught. The proposed Central Institute or Technical College for the education of teachers in the technical schools to be established throughout the country, and also for the sons of merchants and manufacturers, as well as the more promising artisans, is also in process of realisation. The negotiations for a building site are, we believe, settled, and the proposals of the Commissioners of the Exhibition of 1851, offering land for this purpose in Exhibition Road, between the South Kensington Museum and the new Natural History Museum, have been accepted, although the attached condition of purchase, to the effect that the presidents of the learned societies before enumerated should sit *ex officio* at the governing board, was not at first entirely acceptable to the liverymen. The sum required to build, fit, and furnish the contemplated edifice is estimated at £100,000 in the first place, and there is no doubt that the City Guilds see their way to raising it amongst them, with the help of the Corporation.



MAP SHOWING SITE FOR THE NEW TECHNICAL INSTITUTE.

The City and Guilds' Institute has completed its preparatory stage by being constituted a corporation; and the committee of Gresham College in the City have liberally granted rooms and offices to the board for the transaction of their business. Thus, after the lapse of 200 years, the halls of the munificent Sir Thomas Gresham are once more witnessing the deliberations of a council intent upon diffusing natural science among the toiling masses of the City of London.

GERALD'S FOUR-LEAVED SHAMROCK.

"I'll seek the four-leaved shamrock
Through all the fairy dells,
And if I find the charmed leaves,
Oh, how I'll weave my spells!"

"IF I could but find one!" said Grace, pausing suddenly in the midst of her song, and letting her hands fall from the keys of the piano into her lap.

"What is the special virtue supposed to reside in the fourth leaflet of a shamrock?"



1. "HE PERCEIVED THE OBJECT OF HIS SEARCH" (*p.* 175). 2. "'I HAVE FOUND THE FOUR-LEAVED SHAMROCK!'" (*p.* 176).

"Do you not know that a four-leaved shamrock is a supposed fairy talisman, giving its possessor an influence for good over all with whom he comes in contact? He can heal feuds, re-unite parted friends—in fact, be every one's good genius. I think I shall look for one, Laurence."

"To what use would you apply your magic powers?"

"I would make your uncle relent, of course."

"I am afraid that nothing short of a fairy spell will accomplish that, Grace; reason has no effect whatsoever upon him."

"Have you been administering much of that article lately?"

"I spent more than an hour this morning on trying to make him see that after five years of hard work I have a right to a fixed salary, be it much or little. (We would be content with a little, would we not, Grace?) He will not admit my *right* to anything, but says that if I marry to please him, he will take me into partnership at once. As I do not, however, intend to gratify him in this respect, his liberal offers are not of much use."

"Did he name any particular person whom he wished you to marry?"

"Yes; Miss Blake, of Killora. It seems that he and old Blake have been talking the matter over after the manner of the farmers, and have come to an understanding concerning the number of cows and pigs, or their equivalents, to be contributed on each side. My uncle arranged a marriage the other day on

strictly commercial principles, between the foreman's son and old Tom Byrne's daughter, and he is so proud of his performance that he is burning to try his hand on my affairs next."

"Alice Blake is a pretty girl and a nice girl, Laurence."

"She is—about the prettiest girl I know, but for all that I don't mean to marry her. Nor do I think the arrangement would suit her much better than it does me. If I am not much mistaken, she too has plans of her own. But while my uncle has the notion in his head, we shan't be able to make him look at things from our point of view. Try to find the four-leaved shamrock, Grace, and conjure up a little common sense for my uncle. A very little would do. I must go now; will you come as far as the gate with me?"

And the two lovers sauntered out into the twilight and reiterated their last words at the garden gate, leaving the pretty little drawing-room to its sole other occupant, Grace's cousin Gerald, a slender fair-haired lad of about fourteen, who was lying listlessly on a low couch in the bow window.

Grace and Laurence had been playfellows for so many years, that no one but the uncle of the latter felt any surprise when they appeared in the character of lovers. Mr. Latouche, however, was thunderstruck at the announcement of his nephew's attachment to Grace Neville, and declared, in language of which he afterwards felt somewhat ashamed, that should Laurence persist in his determination to marry the daughter of a beggarly half-pay captain, he might bid farewell to his present home and future prospects at Glenallan Mills. Laurence was quite dependent on his uncle, with whom he had lived from childhood; he had always been treated as a son of the house, and on his return from school, had begun to assist his uncle in the management of his extensive flax mills. Looked on by every one as the future master, and liberally supplied with pocket-money, he was nevertheless without any fixed salary, and sometimes felt tempted to envy the mill-hands, who received their weekly pittance, not as a gift, but as a right. He was resolved, however, that come what might he would marry Grace, and he had already begun to make inquiries as to the probability of his being able to utilise the experience gained at Glenallan Mills in obtaining a salaried post in some similar concern. His uncle, meantime, ignoring as far as possible the young man's own projects, lost no opportunity of showing him how smooth his path should be made in the event of his marriage with Miss Blake, whose higher birth was considered by the seniors to balance the accumulated fortunes of three generations of mill-owners.

While Grace and Laurence were loitering in the garden, Gerald was pondering over the only portion of the foregoing conversation intelligible to himself—Grace's jesting wish for the four-leaved shamrock. Poor Gerald was but half-witted; his brain had been injured by a fall in babyhood, and had never properly developed. He was still a child in mind, with all a child's belief in the marvellous—a belief which Grace was chary of discouraging, from an instinctive feeling that his imagination was his highest gift, which once weakened or destroyed would never be replaced by reasoning powers. She was very fond of him, and devoted much time and trouble to the work of training him, and drawing out what little intellect he possessed; while he, on his part, repaid her care with a passionate devotion, obeying her slightest wish, and following her about like her shadow. He was also fond of Laurence, a ride on whose horse constituted his greatest pleasure; and, though quite unconscious of the reason, he understood, in his own dim way, that Laurence's uncle was angry, and that Grace was grieved. Anger was a very terrible thing to poor Gerald, who dreaded stern looks and harsh words as other lads dread blows.

Why, he wondered, did Grace want the four-leaved shamrock. An unwonted fit of shy reserve prevented his asking for an explanation when Grace returned, but he puzzled over the question at intervals during the night, and the wish for a solution of the difficulty guided his wandering steps the next morning to his old nurse's cabin, which stood on a green hill-side, some three miles from his home.

The old woman was sitting on her door-step, knitting, and basking in the sunshine. She looked up joyfully as Gerald approached.

"Master Gerald, alanna, I thought I was never going to set eyes on you again. What became of you all this long while, honey?"

"I don't know, nurse," answered Gerald. "I must have been busy, I think."

"Busy," said old Joan, "poor lamb, sure it's you that'll never know what being busy means; all the better for you, maybe. Sit down there, alanna, an' I'll get you a drink of milk."

Gerald stretched himself at full length upon the grass, and began to drink the milk, which Joan brought him in a little china mug sacred to his own use.

"How is Miss Grace?" asked Joan.

"I don't know," answered Gerald; "she is unhappy, I think. Her eyes were full of tears when she came in from the garden last night. She thought I did not see them, but I did. Nurse, what is a four-leaved shamrock?"

"A four-leaved shamrock, alanna? Why, a shamrock that has four little leaves instead of three."

"I know that. I mean, what is the use of it?"

"Well, people say that 'tis a fairy charm that brings luck to them that owns it. I never saw one myself, but my mother knew a woman that found one when she was milking her cow in the meadow, an' grew rich an' prosperous from that day out. Who was talking to you about it, Master Gerald?"

"Grace was singing about it last night, and she said that she wished she could find one. It had something to do with Laurence's uncle, I think."

"Ah, yes," said Joan. "I suppose Miss Grace thinks that if she had one, she could make things up between Master Laurence an' his uncle."

"And could she?"

"Who knows but she might? By all accounts there's wonderful power in a four-leaved shamrock."

"I wonder if I could find one," said Gerald.

"Perhaps you might. Sure it's to the likes of you that the good people often send their gifts. Look for it anyway, alanna. 'Tis a pity to have Miss Grace fretting."

Henceforth poor Gerald's one dream was to find the four-leaved shamrock, which was to avert the anger of Laurence's terrible uncle and make Grace happy. He was accustomed to rove hither and thither pretty much as he listed, for no one in all the country round would harm the *innocent*, while his own topographical instincts were unerring. Accordingly he wandered about, day after day, telling no one of his purpose, haunting every meadow and every copse where shamrocks grew, seeking the magic quatrefoil destined to work such spells. Such freaks of Nature, however, though they do occur, are very rare, and Gerald's quest was long a fruitless one. He had at first avoided the neighbourhood of Glenallan Mills from an uncounquerable dread of meeting the terrible Mr. Latouche, whose stern face and iron-grey hair appeared to poor Gerald the embodiment of all that was awful. At length, after days and weeks of patient search in other places, he so far overcame his repugnance as to go—in the early morning—to a large meadow through which the mill-stream flowed, and where the most luxuriant tufts of shamrock in all the country round were said to grow.

It was too early yet for the mill to be at work; the immense wheel was at rest, and a slender thread of rippling water flowed quietly on, giving no token of the force pent in by the sluices, and only awaiting a liberating hand to come rushing down and give life and motion to the slumbering mill. There was no lack either of life or motion in the meadows, however; the birds did not wait for the sound of the bell to begin their day, but sang, and chirped, and bustled about, as if determined to make the most of the short time they had the world to themselves; while the rabbits darted in and out of their holes, or nibbled the young leaves, their bright eyes and long ears constantly on the alert against every danger, real or imaginary. Gerald was fond of animals, and at another time would have found much amusement in watching their antics; now, however, his mind was full of his quest, and he moved slowly, kneeling or lying on the ground wherever he saw a tuft of shamrock, and patiently examining it leaf by leaf. At length he drew near the stream, which had steep grassy banks gay with many flowers. The great bell was ringing now, and the workmen were trooping into the court-yard. He should abandon his search for that morning, since he would not risk a meeting with Mr. Latouche. He was turning reluctantly away, when he perceived a particularly large tuft of shamrocks on the steep bank. Some sudden impulse determined him to examine it closely, and he stretched himself on the grass above so as to look down upon it. His sight was wonderfully long and clear, so that he could distinguish every leaflet in what to another person would have seemed but a confused mass of green. At length, to his unspeakable delight, he perceived the object of his search—a leaf actually composed of *four* divisions, at the end of a long trailing stem. Grasping the herbage firmly with one hand, he stretched the other towards his prize. As he did so, the sudden barking of a dog, accompanied by a loud shout, startled him, and losing his hold, he slipped down the steep bank into the stream below. At the same moment the gates of the mill-dam were opened, and the pent-up waters, released from their prison, came seething and foaming down, seizing on poor Gerald's helpless form, and bearing him swiftly towards the certain destruction of the pitiless wheel.

The shout which had scared him was Laurence's, and the bark that of the latter's Newfoundland dog, Carlo. As the boy disappeared from view Laurence ran forwards, urging on his dog with voice and gesture, so that when he reached the bank he found Carlo already struggling with the stream. To take off his coat and plunge in was the work of a moment. The dog's efforts had somewhat retarded poor Gerald's fate, and Laurence was thus enabled to seize him just as he was being drawn under the wheel. A few long moments of desperate struggle, and Laurence found himself once more upon the bank, beside the apparently lifeless form of the lad whom he had saved, and whom he now, for the first time, recognised. A little crowd of men had by this time gathered round him, one of whom, under his directions, carried poor Gerald into the house, and laid him on a sofa in the dining-room. Mr. Latouche and his sister were summoned, and every effort was made to restore the boy to consciousness. When, after a long time, he opened his eyes, his first word was, "Grace!"

"Do you want her, Gerald?" asked Laurence, bending over him.

"Yes," said Gerald, "I have found it for her at last."

"Found what?"

"The four-leaved shamrock;" and opening his hand, he showed the little leaf which he had all through managed to keep safely enclosed within his palm.

"The four-leaved shamrock?"

"Don't you remember? Grace wanted it. She said that if she had one she could make your uncle forgive you."

"I remember," said Laurence, with a pang at his heart.

"What does he mean?" asked Mr. Latouche.

"I am afraid he must have overheard some jesting nonsense of ours about a four-leaved shamrock. You know it is said to be a talisman. May I bring Grace here, sir?"

"Certainly, if the poor child wishes for her. Take the pony-carriage."

Laurence hurried away, and in a little time the doctor, who had been sent for, came. He said that Gerald had received some injury causing internal hæmorrhage, and that his life was a question of minutes rather than of hours. After a little time he opened his eyes and asked again for Grace.

"She will be here very soon now," answered Mr. Latouche.

He was standing a little behind the sofa, and Gerald was quite unconscious that the gentle tones to which he now listened were those of Laurence's terrible uncle.

"I am so afraid of being asleep when she comes," said Gerald. "I want to give her the four-leaved shamrock. She will be so glad to get it; she need not be afraid of Laurence's cross uncle any more."

"Does Laurence say that his uncle is cross?" asked Mr. Latouche, his face changing.

"No," said Gerald, "Laurence is very fond of him, and Grace says that he is good, and that it is foolish of me to be so much afraid of him; but I think she is afraid herself, for she never will walk near the mills for fear of meeting him."

The sound of wheels was now heard, and a moment later Grace entered with Laurence. She went straight over to the sofa, and knelt beside it. When Gerald saw her his whole face lighted up with joy.

"See, Gracie," he whispered, showing his prize, "I have found the four-leaved shamrock!"

"Oh! Gerald," sobbed Grace, "I shall never forgive myself if my foolish talk has led to this."

"Don't cry about me," said Gerald, "I am not really hurt. Put your arm round me—so. Now I can go to sleep comfortably. You need not be afraid of Laurence's uncle any more."

"I would rather never have seen Laurence again, than this should have happened," she cried passionately.

"Right," said Mr. Latouche in answer to Laurence's look of dismay, "she is all the better worth winning for not being ready to fling old ties to the winds for the sake of her lover. How fond of her that poor boy seems!"

When Gerald next opened his eyes, Mr. Latouche, moved by a sudden impulse, bent over him.

"Gerald," he said, "I can promise you that your cousin need never again be afraid of Laurence's uncle."

"I know," said Gerald dreamily, "she will always be happy now."

"As happy as Laurence and I can make her."

Gerald smiled and closed his eyes.

After a time, Laurence, seeing how it was, took him from Grace's arms, and laid him back upon the sofa.

"It is best as it is, Grace," he whispered, "his life as he grew older could hardly have been a happy one. Up to this you have made it so."

The four-leaved shamrock, enclosed within a golden circlet of Gerald's hair, hangs in a locket from Grace's watch-chain. Either by means of this, or of some other talisman in her possession, she has cast such a spell over Mr. Latouche, that not even Laurence himself is more devoted to her than is the stern uncle, to propitiate whom poor Gerald lost his life.

GARDENING IN FEBRUARY.



IF we are still contemplating any additional winter alteration in the garden, it ought to be carried out forthwith, for what easy-going horticulturists are pleased to call the idle months of the year are rapidly passing away. Not, however, that the greatest enthusiast amongst us would be foolish enough to maintain for a moment that there is as much to be done in the garden in the month of December as there is in the month of May.

Now we will assume that a fireside discussion had taken place one winter evening as to whether any garden changes, on a large scale, were practical or expedient, and that a resolution had been arrived at to make a careful survey on the following morning, and the result of our survey would very probably find a counterpart in many an old English garden at the present day. We will suppose then the most ordinary and natural case that can suggest itself to us, viz., that of an old-fashioned country house, standing in its own grounds—say an acre of land, or thereabouts—with its small lawn, flower garden, shrubberies, and a few trees in the front, that perhaps skirts the turnpike-road, and its kitchen garden at the back, bordered also by trees and hedge-rows that divide it from a winding and sequestered lane that runs down to the farm.

Not a few of us are apt to forget that during our—it may be ten, fifteen, or twenty years'—residence at the old home, the trees and shrubberies have been expanding like ourselves, or—to put the fact as gently as we can—growing *embonpoint*. It may be that we have been so long and so daily accustomed to the sight of our laurels and our firs, our chestnuts, ash and birch, &c., that we are as unconscious of the stealthy but certain change in their appearance as in our own. But time has rolled on, and gardener has of late often been seen in council on the lawn with the olive-branches of the family, who seem to show increasing interest in his perpendicular and horizontal pointings and gesticulations. And now, perhaps, the iron-grey head of the household has joined the party, and the morning survey before alluded to has begun in good earnest, for gardener does not mean to lose this opportunity now that he has the animated juveniles to second his propositions.

And he begins by pointing out that those two large fir-trees near the end of the lawn have already more than met and are carrying on an internecine struggle for existence; he takes us behind them and shows us some of their large arms, positively dead, for they have got entangled with the laurestinus, and the laurestinus



with the hedge. Here and there are one or two promising young trees and shrubs, certainly, but he again reminds us that a few years ago there was actually a large geranium-bed between the two firs, and that each year the bed, in the month of May, had to be curtailed.

Paterfamilias seems almost sad as he remembers the truth of it all, and the gardener concludes with the alarming peroration that "if something ain't done soon, sir, another season or two will kill the whole concern right through!" while, by way of appendix, he adds—turning round and pointing to them—"Those standard roses in the middle, there, are pretty nigh worn out; two or three of 'em, perhaps, would be worth moving, but if them two big old trees and one or two others was down, sir, you'd

have more light in the house and it'd be drier, and then the young ladies and gentlemen could have their what-d'ye-call-'em—their lawn tennis." A perfect shriek of applause drove the commander-in-chief in-doors, but he felt he was vanquished, and the wished-for order was somewhat reluctantly given.

As gardeners, however, we should certainly be guilty of a barbarism were we to advocate the destruction of flower-beds and the felling of noble trees, merely to gratify the passion for a game whose popularity may pass away in a very few years. But, on the other hand, we are supposing the not uncommon case of an overgrown garden, the certainty that trees thus allowed to intertwine must, in time, accomplish a mutual destruction; and, lastly, the possibility under these circumstances of effecting a compromise between the lovers of flowers and the lovers of lawn tennis. And yet there is something sad in that death-knell of a fine old tree, "The axe is laid to the root," and the reverberating ring of it seems to pierce through the surrounding silence till it makes our heart ache: we feel that we are parting with an old friend, and that another link to the past is being severed.

We must, however, to business, and take consolation from the fact that our poor trees are unmistakably killing each other, and that by thus thinning out our garden and copse we are but giving strength and better hopes to the prosperity of those younger trees whose growth we are anxious to encourage.

In felling trees that may be standing upon our lawn we must recollect that considerable care is necessary, as our work progresses, not to tear our lawn to pieces by dragging the great trunk of the fallen monarch ruthlessly across the grass. And in order also to break and facilitate the fall of the tree itself, it is well, first of all, to get off a good many of the lower branches—saw them off close to the trunk, and afterwards lay them along in the line on the ground that you intend your tree presently to fall upon. This will, in a measure, prevent some injury to your grass by the weight of the tree as it comes finally crashing down. Now it is evident that all this involves a good deal of extra labour, for one man cannot be expected to get a tree down by himself, and therefore a good deal of extra expense. But, on the other hand, you must bear in mind that you will be able to dispose of your heavier timber—*i.e.*, the main trunk of the tree—at perhaps from 6d. to 9d. per cubic foot. And again, some of the larger arms of your tree can be sawn up and disposed of as "cord" wood. A "cord" of wood contains some 128 cubic feet, and you arrange it on the ground in a pile eight feet long, four feet high, and four feet broad. The price of a cord of wood, of course, varies much in different counties, and in accordance with the time of year. It has been as low as 5s. per cord, and as high as 18s. or £1. After our October snow-storm last year, which broke down so many trees, particularly in Kent and Surrey, wood was fetching from 14s. to 18s. per cord.

And in addition to all this, you will find at the end of these extensive garden alterations that you have a good large stack of smaller firewood for your own use, so that your expenses are very considerably curtailed. The felling of a tree is a good job for a frosty day, but for the moving of shrubs to fill up gaps, choose of course, not frosty but damp, mild, and open weather. Where a garden has been allowed to get thoroughly overcrowded with wood and shrubbery, you will find that a judicious destruction of dying trees, and the shifting of others, will in the end not only give you more space, but you will hardly, if at all, miss those even large and tall trees that have been taken away. If possible, choose a dry and hard frosty day for removing the long and heavy trunks off your lawn, as too much trampling and raking up your grass in wet weather will terribly injure it, and you will run a good chance of treading your lawn to mire, especially when moving your trunks by means of lever power. Your trees then once removed, the next operation is the grubbing up of the roots—a work involving strength, muscle, and time—and in the case of removing such trees off your lawn as pine, larch, and fir, it is worth also bearing in mind that the resinous exudation from those little pieces of dried-up foliage that lie thickly on the ground in a circle underneath your trees, is injurious to the growth and well-being of anything else if you allow this pleasantly odoriferous but destructive débris to remain; rake it all off, therefore, and burn it. The roots of your tree being up, then, fill up with soil all the cavities which, of course, now occur on the site of your old trees, but do not allow the impatience of the young people to see the new turf laid down to induce you to complete off-hand, and at once, your lawn tennis ground, and for this reason: your land will certainly sink a little, and if your new turf is laid down immediately after you have levelled over the space formerly occupied by the roots of your tree, it is at once apparent that you will probably have, after awhile, to take up your turf again, fill up with soil, and relay the turf. Let the land then have two or three weeks to settle, and a few good storms of rain and snow will help you in this and show you what quantity of soil you will require to fill up, or if much more be necessary. The turf again, of course, varies in price, but about 6s. 6d. per hundred is perhaps the average figure for it. As to the moving of shrubs, we have on former occasions given directions as to the best means of carrying out the operation successfully, so that nothing further perhaps need be said at present on this head. The great thing is to get the ball of earth well up with as little damage to the roots as possible; break up also the soil in the newly-dug hole that is to receive your shrub, so as to facilitate the striking out of the roots when once your shrub is planted.

All this, however, takes us terribly away from our kitchen-garden and greenhouse, but we cannot do everything at once, while for heavy work, such as we have been describing, the slack time of the year is, of course, the best to choose.

SOCIAL LIFE IN JAVA.

BY A LATE LADY RESIDENT.



THREE years' residence among a foreign people as one of themselves—and such has been my privilege—gives one decided and ample opportunities of learning the many differences that exist between that people's manners and customs and one's own. And as the study of one's neighbours "from life" is at all times instructive, and often entertaining, I hope that the readers of this paper may glean either profit or pleasure from my notes taken among the Dutch in the best of their colonies.

As every one knows, the towns of Batavia, Soerabaia, and Samarang are the largest and most important in Java, and life in them differs as totally from existence in the smaller towns and capitals of presidencies inland and on the coast as life in London differs from life in the provinces. In each of these three places the number of Europeans and half-caste inhabitants is large enough to form circles of society, and permits even of choice of acquaintance, while in the smaller towns—some like villages—two or three families often comprise the white population. The want of congenial fellowship, and the wearying monotony of the days in these far-away settlements, are in many cases counterbalanced by the benefits arising from a good climate, cheap servants, articles of food at less rates, and, in a word, the various economies to be made by not visiting, neither receiving. Many a Dutch official with but a middling salary, and the ordinary family of five or six olive-branches proverbially said to accompany small means—very likely, too, a couple of them at expensive schools in Holland—is thankful to find himself placed away high on the hills, where he and his offspring can live free and unfettered, relieved from the dear bonds that frequently attend social etiquette. Batavia, the chief town of Dutch India, and the seat of its government, is considered by the colonists to be, although the most expensive, the most pleasant place to live in. The fact of the governor having his palace there, and entertaining a little during his short monthly visit to it, tends to keep things more lively at Batavia than anywhere else in the island.

Suburban Batavia or Weltevreden is possessed of a large square called the Koningsplein, and round this commodious and sought-after houses are built, each in its own compound, but often at no great distance from its neighbour. These dwellings are sometimes floored entirely with marble, but have more often the three principal rooms laid with that now expensive material. Small houses are generally altogether minus the refreshing substitute for matting, the absence or presence of which makes a slight difference in the rent. Rent varies according to the situation and size of a house. Families living at Koningsplein pay 300 to 400 guldens a month (£350 to £400 a year) for a good-sized house, and have heavy taxes in addition. The further one goes from the clubs, the stations, and the few shops, the cheaper rents become ; but even at great distances, and for small houses, the prices demanded make no slight diminution in the pockets of those who pay them. Up-country, in small places, the prices charged for rent and lodging cannot be called moderate. Punkahs are unknown in a Dutch Batavian house, being considered as a rule disagreeable things, inducing headaches and colds in the head ; in some instances they have even been charged with giving a propensity to nausea ! Gas is in all houses within a certain radius, but is a much dearer method of lighting than by the petroleum lamps used elsewhere. Dutch ladies are world-renowned for being good housewives, and Holland's daughters in Java certainly support the reputation well, notwithstanding that the difficulties of guiding an establishment there are increased by its having to be done in a strange language. For the conquered do not use the conqueror's language, but *vice versâ*, and Malay is the medium of intercourse between natives and Europeans. Living cannot be considered cheap either in Batavia, and most likely the effects of the late cattle plague, with the very lately added high rates of taxation, will not conduce to its becoming less expensive. Meat not many months ago was 1 gulden (1s. 8d.) per lb., sometimes dearer, and difficult to procure at any price. Poultry forms a staple article of daily fare, and is very often the staff of deliverance on which a Dutch housewife leans in cases of unexpected guests, &c. There are so many itinerant vendors of fruit, fowls, eggs, fuel—in fact all the minor requirements of a household—that most ladies find the manner of purchasing these articles at their doors, although a troublesome one, most economical and profitable. Every luxury for table use is obtainable in the European and Chinese stores in Batavia. The prices of all these domestic commodities, even after the usual amount of bargaining and beating down, are higher than those paid for the same things in British India.

Early rising is as general a habit in Batavia as in most other hot climates, but morning walks or rides are not indulged in by many. On rising you take your cup of nice *café au lait*. Breakfast is served at half-past seven, and as the Dutch are both simple and frugal, the table is not spread with the many needless hot dishes of its English prototype. Slices of bread-and-

butter, otherwise *boterhammen*, with perhaps an egg or some radishes, or a sardine, a piece of cheese, a slice of cake, or raw smoked ham, or jam—two or three from the list will be all that constitute the repast. At mid-day appears the truly Javanese meal, the *rijst tafel*, or rice table, considered by numerous dwellers in Java the meal of the day. From its name one can easily infer that the rice forms one of its component parts, and so it does, its very literal foundation, for you begin by helping yonrself liberally with it, and then continue by placing a little from every dish handed round on the top of your supply. That done, you mix the contents of your plate well together, and proceed with your meal. Meat, fish, game, poultry, vegetables, pickles, curry, sauces, *sambals*, ground red chillies, chutneys, all come to the front to serve the rice table, and are eaten in one conglomerate mass ; yet, however rash the assertion may seem, and however unappetising my description may read, I am certain that an English person would not be long resident in a Dutch interior in Java before appreciating the meal. The practical Dutch say that when you are in Rome you must do as the Romans do, or in other words, when in Java you must be to a certain extent Javanese in your habits ; for surely, they argue, the natives know best when to rest, what to eat, and how to clothe themselves for their climate, and ought they not to be copied a little ? Thus, after *rijst tafel*, where and when practicable, there is a general exodus by the members of the household to their respective apartments, there to remain until the rays of the afternoon sun begin to decline—happy visitors to the land of Nod, or else refreshing themselves quietly with a "read" in a long chair. The always enjoyable bath, an hour's work or study, passes the time until five o'clock, when, however busy the lady of the house may have been during the day, she appears to do the honours of the tea-table. On holidays, tea-hour in a large family is a thoroughly enjoyable time. All its representatives assemble for the cup that cheers, and laughter and fun, with "chaff" and criticism, make the company, from which the children are not excluded, a gay one.

Shortly after six p.m. every one will be ready to do their respective parts in the evening's programme—some drive and go shopping, some walk, while the elders will pay their *devoirs* to society and return visits, for, following the practical system, visiting hours are not in the heat of the day, but from six till half-past seven p.m. for formal calls, and after dinner, from about nine till eleven—sometimes twelve—for the more friendly informal ones. Not unfrequently ladies call on each other during the morning hours in *robe-de-chambre* or *Sarong and Kabya ;* but these are visits



MARKET-PLACE IN JAVA.

of great intimacy—or are supposed to be such—and are more in vogue among Dutch-*Indian* ladies than the Dutch ladies. First visits with the Dutch abroad —and at home as well, I believe—are matters of more importance and are surrounded with more etiquette than is usual with us. Most of us are aware that in our English colonies it is the new-comers who call on the first settled, or these call on the new-comers, just as the custom of the place exacts ; and bachelors can leave cards at any house they please, taking their chance of finding its mistress "at home" or otherwise. In Batavia the last-comers call on the families already settled there whom they may wish to know, but before going to their houses *in propria persona* they must ask permission to be received. A young man, and an old one too, can never visit a house—for the first time only, be it always understood—without either waiting to ask permission to do so from the head of a family or being introduced to the lady of it, and then requesting her to do him the honour to receive him, &c. This is only a form, for permission is invariably granted politely, and though it is a very disagreeable one from

an English point of view, it has its advantages, as one soon learns on hearing its pros and cons from a Dutch person. There can hardly be a nation more observant of society's polite forms than the Dutch, and though chary of having anything to do with strangers unless properly introduced, they are then hospitable to a lavish degree both to them, and among themselves. No house is without its *logeer kamer*—guest-room; no trouble too great to take for the inmates of it. They may not be particular friends, hardly more than acquaintances, or perhaps new arrivals in Java, with a note from a mutual friend, and otherwise unknown to their host and hostess. No matter; while with them they are made so "at home," treated so right royally, that on leaving they come to the conclusion that they are sorry to go.

Visiting and receiving over, dinner-time comes. This meal is served in Continental style, and cooked in as French a manner as a good Malay cook, under the leadership of a lady knowing all about it, can do it. Cocoa-nut oil is liberally used in the preparation of numerous dishes, as butter is too expensive for all cooking purposes. Some things I noticed that can be mentioned here. Never do the host and hostess take the top and bottom of the table. The latter assumes the place sacred to the father of an English family, the former sitting at the side. I, however, saw this arrangement exactly reversed in one or two households. Never have I seen salt-spoons or fish-knives on a Dutch Batavian table. One helps oneself to salt with the point of one's knife. Finger-glasses are not brought on at dessert, but are before you all dinner-time. A dinner party is neither a stiff nor a solemn affair (though I have been at one that was rather silent), and I only found it differ from the every-day meal in there being a finer display of flowers on the table, a greater number of dishes (far too many), and in our having escorts to and from the dining-room. The ladies were not in "dinner-dress," but wore comfortable visiting or driving toilette; gentlemen, their cool white suits. The host did not ask particular male guests to lead in certain ladies. He himself walked away with the oldest friend, perhaps, or chief lady guest, and the gentleman who thought himself entitled to do so took the hostess. The rest followed as they thought proper. At table our places were indicated by cards on our plates, and care was shown by the hostess in placing sympathising partners together. The married guests occupied seats near the host and hostess at one end of the table, and the other was devoted to bachelors and maidens.

Concerts are of frequent occurrence, and some are good, and others not worth the trouble of attending. Music, on the whole, receives its due amount of homage from society in Batavia. A musical club, called the "Aurora Toonkunst," is in existence, under able leadership, and nearly all the amateur musicians of the place, besides the professsionals, are members of it. One remarks that mostly all the vocal music is in German, maybe for the reason that the Dutch in general do not consider their own a musical language. Whenever the Staf-Musiek, comprising an excellent band of musicians, plays, a concourse of people and carriages is sure to be seen. Chairs are placed in the club gardens, and many persons—ladies, too—go there to pass a social hour, listening to the music and conversing with their friends. Theatrical performances, either public or amateur, are rare. Travelling companies of actors sometimes visit the principal towns of the island, but they are never very talented. The desire for change causes them, however, to receive a certain amount of patronage from the going-out Batavians. Out-door games—lawn tennis, croquet, archery, cricket—are not countenanced or patronised in Batavia. Why not, I never could understand.

Birthdays are noticed by one's friends (and acquaintances who know the date) sending cards of congratulation, and the intimates presenting bouquets to the owner of the anniversary, and sometimes presents as well. For these days—and little and big are never allowed to pass unobserved in a family circle—loving hands prepare gifts in secret, and the parents meditate on some little treat to make the days red-letter ones. One of the favourite amusements, or rather occupations, in Java is reading. Every family belongs to one or more reading societies, supplied with the latest publications of Holland, England, France, and Germany. The illustrated papers and magazines of each of these countries form part of the library, and are eagerly discussed.

Even after the many words I have written I find I have left out many things on which I could have further enlarged. But enough now. Life among the Dutch in Java was happy, pleasant; and grateful, kindly memories of individuals as well as of the nation prompt these lines. Many a "globe trotter" can join me in paying a tribute of praise to Dutch hospitality—in admiration for the whole character of the people, from whom well-bred politeness, ay, even friendly kindness to English strangers, is no uncommon thing.



A JAVANESE RESTAURANT.

AMERICAN DINNERS: HOW THEY ARE PREPARED.

THE principal thing that characterises an American dinner is its abundance. Huge joints of meat are not so common in this country as in England, eight pounds of sirloin, or an eight-pound leg of mutton, being considered a fairly large joint, while the English sixteen to twenty-pound roasts are never seen in private families. But outside of the size of the joint, everything else is on a larger proportionate scale—large dishes of vegetables, and great variety of them, large pies, and a huge tureen full of soup—however few are going to sit at table. Anything less than such abundance savours, to most Americans, of stint; and it is common to hear it remarked among them, of English tables, that everything seemed so scant. "Such a tiny tart for three people!" One may ask—small as it was—if there was not more than sufficient, and be answered in the affirmative; but to those accustomed to see pies made a foot in diameter, whether there are two or eight to eat it, the average English fruit tart would indeed look very small. By the way, when speaking of American "pies," I mean the article peculiar to the country—tarts are unknown as we understand them, *pies* are in their place, and are a great "institution;" pumpkin (commonly pronounced "punkin") and apple pie taking the lead in popularity, although cocoa-nut, custard, and lemon pies are all favourites, small fruit less so.

In providing for their table, the mass of Americans rarely consider what goes with what (of course there are the epicurean few who do). Except the Yankee "pork and beans," there seems to be no viand so wedded to vegetable as to be spoken of together, like our "duck and green peas," "mutton and turnips," &c. Generally speaking, vegetables are chosen haphazard, and so carrots, or dried beans, or turnips are as often served with poultry as not; no question of the "eternal fitness" of things seems to trouble the average housekeeper. Then, not only is the unfitness of certain vegetables for certain meats unthought of, but the vegetables themselves are served with sublime disregard to harmony, and so peas and asparagus, and summer squash and potatoes, often find themselves cheek by jowl on one plate. From four to six vegetables are often served at once, and two merely are considered by any but very fashionable people (who affect English and French customs very much) to be a very mean sort of dinner.

Tomatoes, in some form or other, are invariably on the table when in season, and more often than not canned, even in winter. But although they are now as generally eaten as potatoes are with us, I am told that twenty-five years ago they were quite rare, and few people liked them. They are now, however, the most popular of all vegetables, except potatoes, which are here called "Irish potatoes," to distinguish them from the sweet esculent, and are cooked in a variety of ways—some, I think, quite new to English people.

Thanksgiving Day, which falls on the last Thursday in November, is the great dinner day of the American year; for that festival turkeys are fattened, mince pies and pumpkin pies, and cranberry sauce—always eaten with turkey—are in order, and preparations for Thanksgiving Dinner keep cooks afoot for days beforehand, as Christmas does in England. Not that Christmas is a neglected feast in this country, by any means, but it seems less national than Thanksgiving.

All puddings at American tables are eaten with sauce of some kind, even baked milk puddings; and most popular of sauces is that called "hard sauce." As it is very ornamental, and for some puddings, such as boiled lemon or batter, a very acceptable addition to our list of sauces, I will give it later.

Oysters, of course, take a very prominent part at the American dinner-table. Oyster soup, being certain to suit all tastes, makes its appearance oftener than any other; and oyster pie is one of the favourite accompaniments to roast turkey, as tongue or ham is with English people.

No account of an American dinner would be complete without allusion to celery, which plays a very important part; it is not, as with us, introduced only at the end, with cheese, but the celery glass is put on with the castor, and removed only with it—that is to say, just when at an English table it would come on. Most people take it as the French do radishes, as as soon they take their places, and nibble at it while awaiting the soup, and again when soup is removed, and so on through the dinner. A very delicious soup is made from it, which I have never seen out of this country, and which I will therefore append.

Oyster soup is made in several ways, each differing from the English method, and varying from very good to very bad; the following are the best recipes I know of:—Strain the liquor from two quarts of oysters, add to it a tea-cupful of water, and set it to heat slowly in a covered vessel. When it is near boiling, season with pepper and salt, and stir in a quart of milk; either stir constantly or set the vessel containing the liquor in a pot of boiling water. When the soup is again near boiling add the two quarts of oysters, and two table-spoonfuls of butter rolled in one of flour, stir till it boils, then let the whole simmer five minutes, when it is ready to serve.

Another and richer soup is made as follows:—Strain the liquor from two quarts of oysters as before, add a tea-cupful of water, and season with salt, cayenne, a little nutmeg, and a blade of mace; when near boiling add half the oysters, chopped *very* finely, boil five minutes fast, then strain the soup and return it to the saucepan with a quart of milk. Now have ready some very small forcemeat balls, made of the yolks of two hard-boiled eggs worked to a smooth paste with butter, then mix a tea-spoonful of finely chopped parsley, and six raw oysters chopped very finely, season, and bind with raw yolk of egg; flour your hands and make into tiny balls. When the soup

boils, drop in the remaining quart of oysters and the balls, boil five minutes *gently*, then beat the yolks of two eggs, take a cup of the soup liquor (which you must have drawn back from the fire), add it gradually to the eggs, beating all the while, stir into this a table-spoonful of butter, and then add all to the soup; stir till it reaches the boiling point—but it must *not boil*, or the eggs will curdle—then serve.

Slices of lemon are served with oyster soup, which is here eaten with a kind of biscuit, made on purpose for eating with oysters, called "oyster crackers." Some, however, prefer butter biscuits.

In making oyster soup the principal thing to guard against is either over or under-cooking them. Over-cooked, they are shrunken and tough; under-cooked, flabby and disagreeable. Five minutes' simmering is generally enough to cook them; the right point, however, may best be told by the oyster becoming quite plump, and the beard "frilled." Oysters are never bearded by American cooks.

Tomato soup is second only to oyster soup in popularity. Many would say, perhaps, that it reigns supreme over every other in America, and one or two hotels have acquired such fame for its perfection that they put it up in cans, and send it over the country to such unfavoured mortals as appreciate it, but live at a distance from the spot where it daily sends forth its fragrance. Like oyster soup, it is made in several ways; the following recipe is good, and perhaps the most general:—

Make stock of three pounds of veal and one gallon of water, reducing it to two quarts; scald two quarts of fresh tomatoes, to remove the skin, take away the hard core, and cut them up fine. Strain the stock, put in the tomatoes, stirring hard, that they may dissolve thoroughly, boil half an hour. Season with chopped parsley or celery, and pepper and salt; strain again, and stir in a large table-spoonful of butter with a tea-spoonful of white sugar before pouring into the tureen.

This soup is still better if made of the liquor in which chickens have been boiled. Another excellent tomato soup is made as follows:—

Take a dozen ripe tomatoes stewed without water, as before directed, strain them through a coarse sieve, and to the liquid add a large piece of butter rolled in flour, stir till dissolved, then allow to boil once, add a pint of milk, stir all together, but do not boil again, simply allowing the soup to be thoroughly hot. If it should boil after the milk is added it will curdle.

Stewed tomatoes are prepared as follows:—

Loosen the skins by pouring scalding water upon them, peel and cut them up, remove any hard or unripe parts, stew in a thick saucepan (enamelled is the best) for half an hour, *without adding any water*—the juice is sufficient; then add salt, pepper, a tea-spoonful of sugar and a table-spoonful of butter rolled in flour; simmer gently a quarter of an hour longer, or till the juice is sufficiently reduced. A minced onion—a very small one—improves the flavour for those who like them.

Stuffed tomatoes are a very favourite dish with the Americans, as with French people. Choose large smooth tomatoes, cut a thin slice from the blossom end of each and lay it aside, scoop out the inside, and chop it fine with some veal stuffing; fill the tomatoes; fit the tops on neatly, place in rows in a deep dish, and bake three-quarters of an hour.

Broiled tomatoes:—Select large firm ones, slice half an inch thick, and broil on a small gridiron. A few minutes suffice to cook them. Have ready in a cup some hot butter, seasoned with pepper, salt, a little sugar, and half a tea-spoonful of made mustard. As soon as the tomatoes are done, dip each piece in this mixture, and lay in a hot dish. When all are dished, heat what remains of the butter seasoning to a boil, and pour it over them; serve very hot. By lovers of tomatoes this is considered a very delicious mode of cooking.

Another method of cooking is to scald, peel, and cut a hole in the top of each, into which put a piece of butter, a little pepper and salt, set in the oven and bake an hour, covering them the first half of the time; five minutes before serving, pour over them four table-spoonfuls of cream, whipped a few minutes with some warmed butter.

But notwithstanding the various modes of cooking the tomato in vogue, in no way are they more frequently used than cut up raw and used as salad, either with sugar and vinegar, oil and vinegar, or with the following dressing:—

To twelve tomatoes, peeled and sliced, take four hard-boiled eggs, one raw egg, one tea-spoonful of salt, one salt-spoonful of cayenne, one tea-spoonful of white sugar, one table-spoonful of salad oil, two tea-spoonfuls of made mustard, one tea-cupful of vinegar. Rub the hard yolks to a smooth paste, adding salt, pepper, sugar, mustard, and oil. Beat the raw egg to a froth and stir it in; lastly the vinegar. Peel the tomatoes, slice them a quarter of an inch thick, and set in a dish on ice, or in a very cold place, while you make the dressing. Stir a lump of ice rapidly in the dressing, when made, till cold, then take it out and cover the tomatoes with the mixture, setting it back on ice until you send it to table. This is a delicious salad, especially when ice-cold.

The before-mentioned "celery cream soup" is made as follows:—

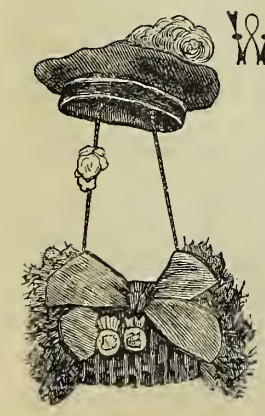
Take the white part of two large heads of celery, either grate it or chop it very fine, set it to boil in a quart of milk, in which put a cup of rice; allow the rice and celery to slowly stew until they can be rubbed through a coarse sieve, adding more milk if they get too thick, then add to them an equal quantity of strong veal or chicken broth, white pepper and salt to taste.

Catherine Owen.



WHAT TO WEAR.

CHIT-CHAT ON DRESS. BY OUR PARIS CORRESPONDENT.



WE are content at present with winter modes, and there is but little to indicate what the summer and spring are likely to bring forth. In fact, there has of late been a great stagnation of fashion, and the leading dressmakers have had nothing to do but to give perfection of work, and improve on those styles which during last season proved a success. And yet, perhaps, it was never more difficult to dress really well, such good fit and such good taste are required. Women make dress an artistic study, and by the exceeding care bestowed upon it retain a youthful appearance far longer than their mothers did.

I spent a long morning at the Magasins du Louvre the other day, and it is astonishing what a number of pretty things you can get there, and likewise at the Bon Marché—flannel petticoats, for example, at about six francs, with plaited flounces edged with lace ; handkerchiefs marked with the initial, about a franc apiece, and good-wearing ones too; gloves of all kinds at half-price, and endless fichus and neckties, and all the little prettinesses which give so much finish to good dressing.

Paris is a wonderful place. You can obtain the cheapest and the most costly things as regards dress ; but no capital in the world can approach it as far as perfection of taste and finish goes. French fingers

are clever indeed; they do their work admirably, and leave no trace of how the work is accomplished.

The young Queen of Spain bids fair to be the Queen Regnant throughout Europe in the realm of dress. Everything she wears is well-considered and in exquisite taste; moreover, she discovers real novelties, and adapts what is not new in novel fashion. At a Court reception last autumn, she appeared in a dress of white satin and cloth of gold, plaited in folds all round, like the curious Segovia worn in some South American countries. The kilting showed alternate folds of satin and gold, producing the most gorgeous effects without the least stiffness. Her Majesty has brought out, or rather unearthed, the hats which flourished in Spain many hundred years ago, when the English Stuarts ruled Great Britain; and she has selected, as suitable for wearing with them, the slashed sleeves and jewelled bodices which characterised the same period. Simplicity neither suits her nor the Spanish nation, and she is making her way surely into their hearts.

Shooting dresses are now ordered alike by English and French women. English women select good substantial cloth, made as short skirts, and it is an excellent plan to have a plaited flounce to button on and off, so that if required they can be used for ordinary walking. Over this is a tunic, and then a Norfolk jacket on a new plan, the plaits being carried up only so far as the waist, so that the slope of the shoulders is not interfered with. There is a pad for the gun, and the costume looks as if it were meant for real work. Now-a-days women are proud to land their salmon, and bring down their birds. French women have taken up coursing, and a well-known viscountess appeared amid her guests in the particular colours adopted by her male friends when coursing, while some other ladies donned scarlet jackets, made by the Empress of Austria's tailor.

There is much that is new in hair-dressing. The hair is more elaborately arranged, but closer to the head. Coiffeurs are finding out that for bald patches it is best not to lay a heavy weight of hair upon them, but to make the false hair on a foundation surrounding the bald patch, letting the long hair fall over the patch. The foundations are better made of fine gauze than, as heretofore, of hair, the hair being worked into the fine gauze. A good many additions are made to the hair with invisible foundations, like a strip of ribbon, to which a long strand of hair is attached, curled at intervals. This is useful for placing over the head between the curls and the coil. Another novelty is the long strand of crêpé hair, worn in the same fashion as the curls, over the forehead, and gradually superseding them. Alsatian bows are quite replacing caps, but they want careful adjustment; they should form a double loop and be attached to elastic, which slips over the head.

London fashions during this winter, judging from what I saw on the occasion of a recent visit, differ considerably from Paris ones. The London fashionable bonnets are frequently either old gold or red—vivid red, generally plush, fitting the head closely, and tied with strings beneath the chin; the shape is sometimes



called the "Princess," as I think the Princess of Wales made it popular. Her Royal Highness wears everything with exceptional grace, so that what she wears is always a favourite. English women affect only two styles of out-door covering—the Mother Hubbard cloaks, and long brocaded jackets, bordered with fur, reaching to the hem of the dress. In Paris there are twenty good shapes in mantles worn. English women are, however, copying French women in one thing: they are wearing handsomer opera cloaks, made of the richest brocaded velvets and satin.

French women's dresses, as chronicled by fashion, read curiously; for example, one intended for the Bois de Boulogne, made of moss-coloured Indian cashmere, worked with autumn leaves, an aumonière to match, the whole trimmed with beaver, and completed by a Charbonnier hat with large owl; or a dress of "frightened mouse" colour, embroidered in old silver, worn with a lace pelerine, also embroidered in old silver, the tunic and skirt trimmed with heavy cord, and with it a silver-grey hat was worn. Our countrywomen abjure all that is fanciful in favour of pot hats and Newmarket coats, which should be made in the finest Melton cloth, dark brown and olive-green being most in favour—brown is certainly the favourite colour in England just now.

We are shortening our dresses and lengthening our gloves. No gloves are so well worn as the "Sarah Bernhardts," which reach far above the elbow, in peau de Suède—brown bread colour.

To dress well, it is best to have few things; but let those things be good, and really what is wanted. The sale of the effects of a deceased duchess, which was going on in England when I was last there, was to my mind the greatest lesson as regards the undue acquiring of articles of dress. It was pitiable to see the piles of gloves, stockings, shoes, dresses, &c., which must have cost much and were utterly valueless.

Bead trimmings preparing for the spring are simply exquisite. I was looking a few days ago at the front of a black silk dress being prepared for a Court reception—the tablier was worked all over with beige beads, in several shades of browns, beige, and gold; also at a bridal dress, the front of which was trimmed with a diagonal band of pearl trimming, with heavy tassels of pearls. Brides now wear real orange-blossom where possible, and tufts of living flowers appear on the skirt; there are more tulle veils than lace, and these are not very often worn over the face. Brown velvet is the favourite dress for going off in, but many brides go to an hotel after they have left home, to put on a veritable travelling dress. What a concession this to Mrs. Grundy!

We have worn shoes with pointed toes long enough, there is a reaction now in favour of square ones, which always had many patrons in France. Nothing spoils the foot more than too pointed toes to boots and shoes.

Very many people wear red cashmere and flannel dresses this winter. The latter are made with plain skirts, full banded bodices, and sleeves with puffs at the elbow and shoulder, and at the neck large treble box-plaited ruffs, of five inch wide lace turning downwards. Reticules hanging at the side to hold keys and handkerchiefs have been eagerly adopted. Plush is by far the favourite material for them, as it is for purses, portemonnaies, photo books, and, more's the pity, for coat-bodices, which prove most unbecoming to the figure.

The two woodcuts illustrating groups wearing out-door and evening dresses will give ideas for current fashions for February. A glance at the lower group shows three promenaders enveloped in large mantles, for stately garments of rich materials still continue to be the rule, brocaded velvet and plush remaining the most popular fabrics. The carriage-cloak on the right-hand figure is of black woollen-backed satin, which is sufficiently thick and warm to dispense with a lining; the trimmings consist of black lace and reversible satin ribbon. This new satin is somewhat costly, but looks handsome; the hood is lined with ruby plush to match the reverse side of the ribbon, which is ruby satin. The large mantle worn by the centre figure (a youthful matron) is of seal-cloth, the new substitute for seal-skin; lighter in weight than the real fur, but more bulky-looking, consequently it should only be adopted by slim women. The trimming in this instance is black marabout; both hat and muff correspond, being made of the same materials as the mantle. Fur muffs, be it remarked, differ considerably from those trifles of feathers, flowers, and lace turned out by dressmakers, an example of which will be found in the initial letter of this chapter. The hat accompanying it is called the "Russian General," and is in better taste than the Tam o' Shanter.

But this is a digression from the remaining figure of the group we are considering. She is a young girl in a Newmarket coat, a wrap that is fast superseding the ulster; her headgear is a Tam o' Shanter crocheted in crimson Arrasene wool, with an Arrasene silk tuft at the top.

The evening dresses in the upper woodcut have been designed for youthful wearers and are combinations of satin, foulard, broché gauze, and fine clinging woollen fabrics. The colours are not startling; they include "crushed raspberry," also the shade known as "champagne," and the quaint marshy green that borders on yellow. The seated figure listening to the music wears a combination of silk gauze and satin, the drapery and trimmings generally being of the lighter material. Black and gold gauze over black silk would also be satisfactory made after this model.

Two of the audience (who are standing) wear broché and plain satins made with many gatherings and trimmed with chenille fringe. The cuirass bodice on the first figure is of light blue broché, the plain satin being used for the scarf-drapery, and for the folds round the square-cut bodice. The gathered pointed plastron in the next figure is an equally fashionable style of make.

The violinist's toilette is of dark green and dead gold satin, ruby chenille flowers and gold plush leaves round the throat. The flowers on the pianist's dress are also chenille, but in this instance they are white



"I STILL REMEMBER WITH WHAT ZEST
I READ, AND GUESSED THE SECRET PART."

("BUT PARTLY READ," page 187)

marguerites, and very effective they prove on the satin of the "crushed raspberry" shade.

Plush collars, plush hoods, and plush fichus trimmed with lace can be worn with any of these dresses. They add considerably to the smartness of a toilette, for plush, with its long silky fleece and colourful reflets, always proves becoming. Pale shades of Indian gauze, gold, silver, and silk embroidery are added to these plush accessories, which are also sometimes painted in oils, as are plush muffs. A point to be remembered in these painted trifles is, that the design selected should be small flowers of graceful growth.

BUT PARTLY READ.

I OPENED once some quaint romance,
And reading, fast the moments flew;
But, hindered by some trifling chance,
I failed to read the volume through.

And now 'tis years ago, and life
Seems long as I that time recall;
I know it was some tale of strife,
And lives were made to climb and fall.

I still remember with what zest
I read, and guessed the secret part;
And now would like to learn the rest,
But greater wonders move my heart.

Oh, friends of yore! oh, sacred band!
Forsaken, scattered, changed and dead,
How, in my lonely heart, ye stand
Like tales of youth but partly read!

WILFRED WOOLLAM.

THE GATHERER.

Cleaning White Silk Lace.

A German contemporary gives the following plan for cleaning white silk lace:—The lace is first sewn over small clean slips of wood to keep it evenly spread out. It is then laid over-night in warm milk to which a little soap has been added; afterwards rinsed in fresh water, then laid for the same length of time in warm soap-lye, and finally rinsed again, without any friction. If an additional bleaching is still required, put the lace while yet in its damp state in the rays of the sun.

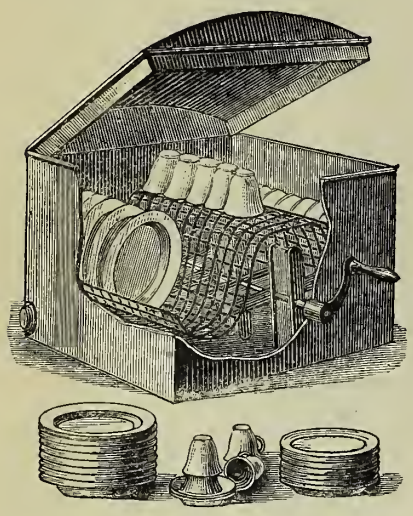
Linen lace can be beautifully cleaned by covering the outside of a large glass bottle smoothly with stout linen or white flannel, upon which the lace is sewn in a number of coils or turns, and over the whole some coarse open tissue is secured. The bottle thus clothed is allowed to soak for a time in lukewarm soft water, and the outside wrapping is then rubbed with soap and a piece of flannel. When this has been done the bottle is to be laid a-steep for several hours in clean soft water. It is then to be rolled between dry towels, dipped in rice-water, and rolled again. Finally the damp lace should be unfastened from the bottle and ironed at once between linen cloths.

Phosphated Flour.

The wheat-grain, as is well known, consists of an outer skin or bark, and an inner kernel of starch, separated by a shell of gluten. Now this is the most nutritious portion of the grain, and contains the phosphates and nitrogenous matters, which are the best food for the brain and tissues of the body. It is, therefore, a great pity that so much of it should be pared away from the wheat in the ordinary process of milling and sifting, and turned into bran and "middlings," for the use of cattle, instead of being left to enrich the fine wheat flour of which our bread is made. In raising bread, too, by the use of barm, in order to make it more porous, and absorptive of the digestive juices, a considerable proportion of the gluten remaining in the flour is decomposed during fermentation. It would therefore be another gain if a means could be found of raising the bread without the use of a yeast or leaven which preys upon the gluten, in order to form the carbonic acid gas necessary to raise the dough. From time to time attempts have been made to remedy these two defects. "Whole meal" bread, or bread made of unsifted flour, has been tried instead of white flour, but it is subject to the drawback that the bran in it tends to irritate the bowels. Again, Dr. Dauglish's method of raising bread by kneading into the dough a solution of carbonic acid gas in water produces an excellent light bread. A new process brought to our notice is, however, designed to remedy both defects at once, and produce a self-raising bread having all the nutritious salts restored without the intermixture of bran. This end is attained by adding to the flour, before it is sent from the mill, the proper proportion of phosphates which have been removed with the bran, and which, when moistened in the ordinary process of making dough, give off the carbonic acid necessary to raise the bread. Any kind of flour is thus rendered as nourishing as "whole meal," and yet retains its tempting whiteness, while bread and pastry made from it have been highly recommended for their wholesomeness.

A Machine for Washing Dishes.

Of all the unpromising themes for the cogitation of those of an inventive turn of mind, we should have thought that an appliance for washing dishes would offer the smallest attraction, if indeed it were not altogether impracticable. Yet such an opinion would have been erroneous, for an apparatus of this kind has actually been patented. It consists of a shaft carrying paddles, which revolves in a box-shaped vessel of tin or galvanised iron, a curved grating being placed over the shaft to support the dishes that are to be washed. Cups and other hollow articles are laid above the shaft, flat dishes on either side of it. The paddles are provided with flanges in order to make them throw up more water and with greater force than if they were plain, while the shaft is turned by means of a crank. The vessel being partly filled with water, to which a little soap has been added, the shaft is vigorously turned to right and left for a few moments, when the lid of the vessel is taken off and the dishes are rinsed by pouring some water over them. The dishes are then thoroughly washed, without breakage or chipping, and with a very small amount of labour. The inventor claims that this novel dish-washer will cleanse as many dishes in five minutes as one person will clean in an hour in the usual way, and that therefore its use in hotels, restaurants, and families whose household arrangements are conducted on a large scale, is recommended in respect of its saving of time and its tenderness towards crockery and china.

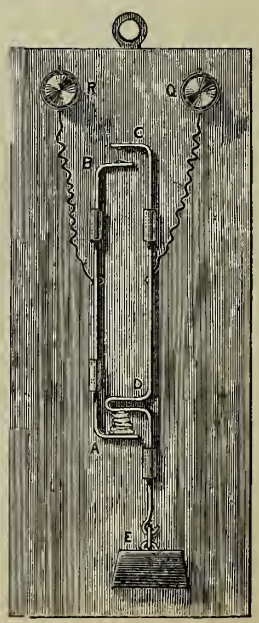


An Electric Lift.

To Dr. Werner Siemens is due the credit of first successfully applying the powerful electric currents generated by the modern dynamo-electric machine, for electric lighting, to the propulsion of carriages along a railway ; and we have now to record his successful employment of the same power to hoist the cage or carriage of an elevator. The electric railway is now being constructed between Berlin and one of its suburbs, and the electric lift has been in operation of late at the Mannheim Industrial Exhibition, where, in the course of a few weeks, it raised over 8,000 people to a height of nearly 100 feet at a speed of one and a half feet per second. The cage is suspended in the shaft by two wire ropes, which pass over two pulleys at the top of the shaft, and carry at their other ends two counter-weights which balance the average weight of the loaded cage. By this arrangement, only a little extra electric power is required to move the cage up and down the shaft. This power is supplied by a dynamo-electric generator stationed on the ground, and it is conducted from the generator to a second dynamo-electric machine attached to the cage. Its action is to rotate the armature of this second machine, and this rotation is communicated by means of an endless screw on the axle of the armature to a pair of toothed wheels also attached to the cage. These toothed wheels gear into a kind of rack or ladder, which runs up the middle of the shaft through a hole in the centre of the cage, and as they revolve they climb the ladder and force the cage upward. The conductors for the current are led along this ladder and the current is tapped from them by two metal rollers which make contact with them. By means of a handle working a "commutator" the current is made or broken, or reversed, and the cage is hoisted upward, stopped, or lowered to the ground. For large hotels and boarding-houses, if not for stores or warehouses, the electric lift is likely to prove exceedingly useful.

An Electrical Fire Tell-tale.

The rise of temperature which accompanies the outbreak of a fire in a particular part of a building, is in several ways made to ring an electric alarm bell. One of these is to have a mercurial thermometer in the room, so arranged that when the mercury column rises to a certain critical degree it will make contact between two platinum wires sealed into the tube, and thereby complete the electric circuit and ring the bell. The figure illustrates a still more simple plan ; it consists of two bent metal stems, A B and C D, which are put into connection, by means of the terminals Q R, with a voltaic battery and an electric alarm bell. At B and C two platinum contact studs are shown on the stems, and these are kept apart by a piece of common suet or tallow placed between the stems at their lower parts, A D. When the temperature of the room increases so much as to melt the tallow, the stem C D is pulled down by the small weight E, and the contact stud on C makes contact with the stud on B, thereby completing the electric circuit, sending the battery current through the bell, and sounding an alarm. For factories this plan may be useful on account of its simplicity, but the presence of grease quite unfits it for a room.



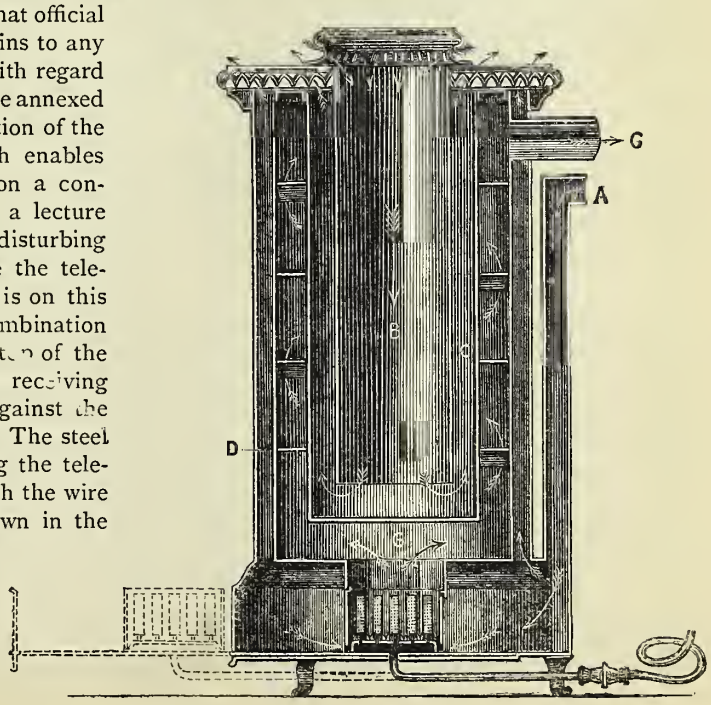


Alarm Telephones.

It is proposed to add the telephone to the fire telegraphs of Chicago, in order that the character and true place of a fire may be communicated to the nearest fire station, or the particulars of a burglary or other crime committed may be delivered at the police office. The suggestion is a valuable one, and shows how in a great city the telephone may aid the cause of public law and order. In the case of a riot, it is intended to have a reserve force and ambulances at the telephone stations all ready to start when the alarm is given ; and should a serious crime be perpetrated, an alarm bell is to be rung from the station-roof to warn every policeman on his beat. In our own country, the Leeds Water-works and Fire Brigade committees are, we understand, about to adopt the telephone between the town hall police station and the turn-cock's residence at the water-works, in order to enable that official to regulate the pressure of water in the mains to any part of the town where a fire breaks out. With regard to the improvement of the telephone itself, the annexed engraving shows a very convenient combination of the transmitting and receiving telephones, which enables a person to repose in his chair and carry on a conversation with a distant friend, or listen to a lecture delivered in a neighbouring hall, without disturbing himself. It is, of course, American, where the telephonic service is far more advanced than it is on this side of the Atlantic. As will be seen, the combination is effected by a steel loop placed over the top of the head and carrying two semi-spherical Bell receiving telephones at its ends. These it presses against the ears, thus excluding all extraneous sounds. The steel spring is magnetised and its ends carrying the telephones are therefore magnetic poles, on which the wire coils of the telephones are mounted, as shown in the right-hand telephone. The Edison transmitting telephone which the person speaks into is hung from the other two by an elastic yoke, and adjusted to fit over the mouth. Flexible conducting wires, of course, lead to the telephone line, which in turn is connected with the other party in the conversation.

Adams' Gas Stove.

The new gas stoves of Dr. Adams, of Glasgow, as exhibited recently at the Glasgow Exhibition of Gas and Electric Lighting Apparatus, have attracted a great deal of notice. They are of two sorts, for heating and for cooking ; and both kinds are constructed on strictly scientific principles, which is more than can be said for many other stoves, wherein appearances seem to have been the first object of the designer. The heating stoves are admirably adapted for dwelling-houses, offices, churches, and conservatories. Not only do they distribute heat by direct radiation from their surfaces, but they also give off a supply of pure warm air, and this air may either be diffused from them in a dry state or artificially moistened, an arrangement which eminently fits them for the rooms of invalids or the wards of hospitals. Moreover, the quantity of warm air given off may be modified at pleasure, or stopped altogether. The better to radiate the heat, a plain iron outside, devoid of any fanciful ornamentation, is adopted. The accompanying illustration shows a section of one form of stove suitable for house apartments, school-rooms, warehouses, conservatories, &c. The gas is let to the burners by the gas-pipe seen below. These burners are cylinders of plumbago, which become red-hot and make a kind of fire in the bottom of the stove ; and the heated air and gases which they give off do not pass up a single smooth flue, as is ordinarily the case in gas stoves, but circulate through a series of cells, enclosing the chamber of pure air to be warmed. In the figure this hot gaseous current is shown by *forked* arrows traversing the series of chambers with their contracted openings, and



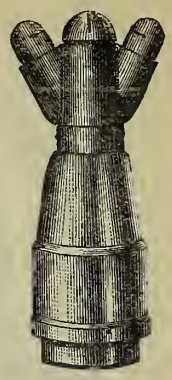
finally making their exit by the chimney G. The course of the pure air which enters the stove from above to be warmed is indicated by the feathered arrows. It first passes down the wide central tube B, then up the narrower middle tube C, escaping by the outlet holes in the top of the stove. This is the main stream, but another outer stream enters by the pipe A, at the back of the stove, and after being warmed in a chamber surrounding the fire, passes upward by the outer shell of the stove D, and escapes also at the top. The dotted lines at the base of the engraving represent the arrangement for preventing explosions. When it is desired to light the stove, the whole furnace is drawn out of its chamber on a sliding tray or drawer, and until that is done the gas cannot issue from the burners. Moreover, the act of drawing out the furnace permits a large supply of fresh air to enter the furnace chamber; so that the gas-jets can only be ignited openly in the unconfined air of the apartment, where it is no more liable to explosion than an ordinary gaselier. One practical result of Dr. Adams' arrangement is that the heating power of the stove can be accurately raised or lowered by simply raising or lowering the gas-jets, so that the temperature of a room can be promptly regulated. In the cooking stoves of his invention external radiation is prevented by coating the outer casing with a metallic alloy, incorporated with the substance of the case by an electro-chemical process, and Dr. Adams affirms that from four to twelve times more heat escapes from the ordinary cast-iron exteriors than from his metal skins. As there is no chance of contamination with the heated gases, the viands being cooked in these stoves retain all their natural delicacy of flavour.

A New Vine.

A French explorer in the valley of the Niger reports from Koundian that he has discovered a promising new vine. The root of this vine is tuberose and perennial, but its branches singularly enough are annual, and die down every autumn. It can be cultivated, he says, as easily as the dahlia. The grapes are plenteous and excellent, and in order to acclimatise the new fruit in Europe both seeds and seedlings have been sent to France for cultivation.

The Focus Gas-burner.

It is, we believe, a melancholy fact that the quality of gas supplied by some companies to the householders of London is considerably inferior to that of many provincial towns; but there can, on the other hand, be little doubt that more light could be obtained from it by the use of better burners. There are several patent burners in use, most of which will bear out this statement. Among the most recent is one that hails from New York. It is invented by a Dr. McGeorge, and has been styled the Focus Gas-burner. In this burner, two small side jets are directed to a point at the base of the flame, throwing heated gas mixed with air; in this way, the gas becomes more expanded and rarefied, while a greater amount of oxygen is carried to the flame. The blue portion of the flame is reduced, so as to extract from it the utmost degree of illumination, and the more thorough combustion likewise checks the out-flow of carbonic acid gas. Since gas admits of almost unlimited expansion by heat, the more the particles are heated and separated, the more perfect is the combustion, and the greater the production of light. By means of a regulator, enough pressure is maintained to secure complete combustion in this burner. Testing the "Focus" with a common burner under the same pressure, and with the same quantity of gas, the former was found to yield twice as powerful a light as the latter.



Blacking Boots by Machinery.

"'Chine your boots, sir," will, by the change of a single letter, easily adapt the present cater-cry to that which would become necessary in the—probably remote—event of the shoe-blacking machine being employed by those who, for a consideration, are willing to "polish" the boots of the public. The machine in question is the invention of an ingenious Frenchman. Its details are, as might be expected, few and simple, comprising mainly a series of circular brushes for cleaning the boot, applying the blacking, and polishing—the motive power for the same being supplied by a treadle that imparts the requisite rotary motion. The chief point in connection with the machine has reference particularly to the method of applying blacking to the brush specially devoted to that humble but most useful substance.

Best Form for Lightning Conductors.

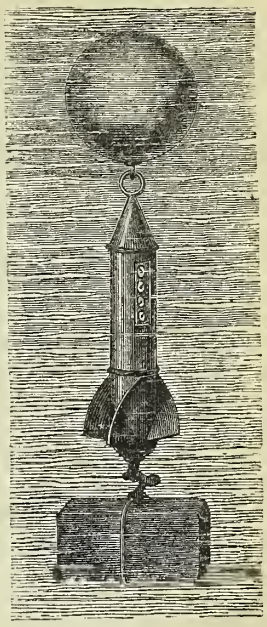
What is the best form for a lightning-rod, has long been a moot question among electricians. Some have maintained that it should have as much surface as possible, because the electric discharge travels along the surface either wholly or in part at least, while others have argued that the sectional area of the conductor is the dimension to be attended to. The result has been that lightning-rods for ships and buildings take divers forms, some makers preferring flat strips or hollow tubes, in order to give a large surface, and others adopting simple cylindrical rods or wire ropes, in the belief that *mass*, not *surface*, was the essential requirement. Recent experiments of Mr. W. H. Preece, the Post-Office electrician, have evidently proved that extent of surface in the rods does not favour lightning discharge, and that with copper rods of the same conductive power for electricity the mass of copper employed is the important point. No more efficient lightning conductor than a cylindrical rod or a wire rope can, in the opinion of Mr. Preece, be devised, and the thicker the diameter of the rod the better. Evidently a wire rope is preferable to a solid rod, on the score of its being less liable to break across by a blow.

In connection with this subject, a very useful rule for placing lightning-rods may be drawn from the following relation between their height and the space they protect, which has been arrived at by Mr. Preece, who finds that a rod protects a conical space around, whose height is the length of the rod, and whose base is a circle of radius equal to the height of the rod. The side of this volume is a quadrant of a circle whose radius is equal to the height of the rod. Mr. Preece has never been able to discover any instance of lightning-struck houses in which damage was done within such a cone. The theorem shows, however, that every prominent point of a building should have its own lightning discharger or set of points, unless such point comes within the protected area, and that every turret of a church tower should have its own discharging points.

A Pneumatic "Cash."

Shopping is a tiresome business, and one great drawback to the comfort of our large "stores" and warehouses is the necessity of going to the cashier's box to pay for the purchases made. The system of "cash" boys or girls who perform this duty and return with the change is far pleasanter for the customer, since it enables him or her to remain quietly seated at the counter. But the drawback to this antiquated plan is its noisiness, and the incessant calls for "cash," attended by the hurrying of that functionary to the scene of action, are, to say the least of it, annoying. A remedy for both of these imperfect systems has, however, just cropped up in America—that land of time and worry saving novelties—and we hope it will soon be introduced into the great retail establishments of London. Cash boys and girls have been replaced by a system of pneumatic tubes, such as carry letters and telegrams from the central telegraph station at St. Martin's-le-Grand to the numerous local post-offices in the metropolis. Each counter in the shop is connected to the central box of the cashier by two pneumatic tubes, one to carry the account and money paid in, and the other to take back the proper change and the receipt. An inspector attends at every counter and works the tube, receiving the money from the customer and giving back the change, and this is effected while the person who acts as "wrapper" for the counter in question is wrapping up the goods. The "carriers," which dart along inside the tubes under the pressure of the air, are little cylindrical boxes of steel, lined inside with green baize, and fended at each end by felt cushions. Each carrier is of the exact diameter of a silver dollar, and is capable of holding thirty dollars. By means of a steam-engine and an exhaust-pump in the cellar, the air is constantly being exhausted at the delivering ends of the tubes, so that whenever the carrier is loaded into the mouth of a tube it is immediately sucked to the other end, where it is delivered automatically by a special device. Not only are time and noise saved by this ingenious arrangement, but the ventilation of the ware-rooms is improved by the continual supply of fresh air which is discharged into them.

A New Deep-Sea Sounding Apparatus.



It is only within recent years that the secrets of the deep sea have been investigated in anything like a thorough manner, but the researches of Sir Wyville Thomson, Mr. Carpenter, Mr. Moseley, and others, encourage us to hope that much will yet be done in what is, comparatively speaking, a new field of scientific work. Meanwhile the little instrument figured in the woodcut may be taken as some slight evidence of the growing interest in deep-sea exploration. It is the invention of M. Paul Rousset, of St. Petersburg, who claims that its use renders a sounding-line unnecessary, and insures more accurate soundings than can be obtained by the usual means. It consists of a sinker that is joined by a sort of hook-and-eye attachment to an ordinary registering log, the log being in turn fastened to a buoy of capacity sufficient to raise it after the separation of the sinker. The registering mechanism is prevented, by a special device, from acting during the lowering of the log, but it operates as soon as the log ascends. The movement of the sinker is simple. So long as it is unimpeded in its descent it hangs suspended to the log, but whenever it touches the bottom the hook falls out of the eye, and the log being freed from its counterbalancing weight is at once carried to the surface by the buoy, the screw in the lower part of the log in the meantime actuating the mechanism by which the distance through which the log passes is recorded.

A Protective Dress for Firemen.

Several years ago Herr Oestberg, a Swede, invented a protective felt dress for firemen, kept wet by water supplied to it by a tube, but it failed in practice owing to the fact that the water had to be conveyed to it in this way. Recently Mr. August Beyer, of New York, designed a suit which is more practicable. It is made of a thick woollen fabric coated with a compound of red ochre, glue, and sulphur, and is lined with oil-cloth, while between these cloths there is a layer of compressed wool impregnated with coal-dust or such-like material. The metal helmet has a bull's-eye lens in front for the fireman to see by, and underneath it a flexible tube or proboscis hangs down, with a packing of wet sponge inside to cool the air and filter it of smoke before it is breathed. The proboscis is kept expanded by a spiral spring within it, and the bottom is closed with a perforated plate. The jacket is connected to the helmet by means of a collar. The outer coating of the dress is fire and water proof, but as it blisters under the heat it has to be renewed after every exposure.

A Glass Window Blind.

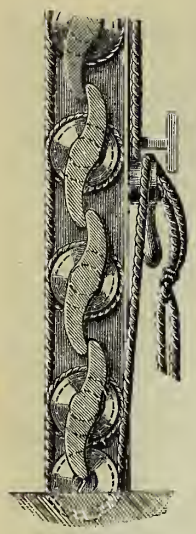


FIG. 1.

A novel window blind, which comes to us from America, is illustrated in the two accompanying figures. The movable bars or slats of the blind are made of glass, either milky-white or coloured to any tint, and they are made of various forms and sizes. The slats have no rods or bands to operate them and interfere with the entrance of the light; each is fitted at its ends with a small pulley, round which the cord passes, which opens or closes them all simultaneously. The blind admits of good ventilation and excludes flies and mosquitoes, besides forming an additional impediment to burglars. Owing to the fact that the slats can be engraved with tracery, or tinted to any required shade in harmony with the furniture of the room, these blinds can be made an adornment to a room, and as they require no fresh painting and are easily kept

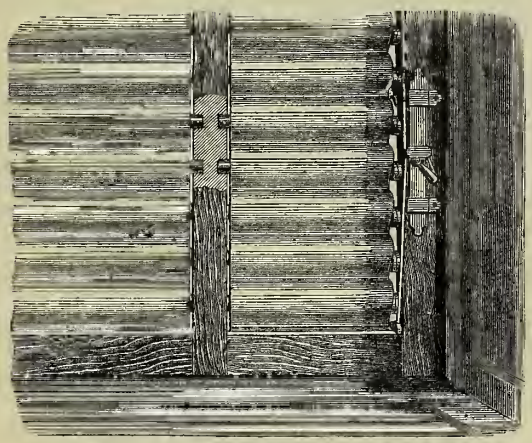


FIG. 2.

clean, they must be considered an improvement on the ordinary Venetian blind. Fig. 1 is a section through the slats, showing the shifting pulleys; and Fig. 2 gives a front view of the corner of a blinded window.

Flexible Rail Joints.

Joints in rails were at first not so strong as the solid rail, but latterly they have been strengthened by the "fish-plates" at the expense of their flexibility, and though the ordinary joint is now as strong, it is more rigid than the rail, and therefore tends to cause uneasy travelling. To remedy this defect Colonel Richard Long, of Chicago, has designed a fish-plate which increases in thickness from its ends to its centre. The result is that there is no sudden accession of rigidity at the ends where the plate is bolted to the solid rail, for the plate there is thin, while at the middle point, where the break between the two rails occurs, the fish-plates are thickest and most rigid. In America, where comfortable locomotion is so much sought after, these joints are being rapidly introduced.

A New Forage Plant.

"Deschugara" is the name of a new forage plant largely cultivated in Turkestan and some parts of Russia. According to Mr. Christy, it is a *Sorghum*, closely allied to the Dhurra grass of India. It has a tall stout stem, and is readily devoured by cattle either in the green state or as straw. The grain resembles oats and barley, and is ground into flour for human consumption or given whole to animals. One variety ripens in three months after being sown, and yields a thirty-fold return, 100 lbs. of seed producing about 3,000 lbs. of garnered grain.

"A Simple Spy-glass."

A correspondent writes:—"My attention having been called to the November issue (No. 72) of CASSELL'S FAMILY MAGAZINE, wherein is described 'A Simple Spy-glass,' claimed to be the invention of Herr T. Geiger, Stuttgart, I think the accompanying blue book, containing my specification and drawings filed at the Patent Office in April, 1875, will convince you of the fallacy of Herr T. Geiger's pretensions.—W. LUCE HOSKING." We have little doubt that this is a coincidence, and that Herr Geiger had no idea of the previous existence of Mr. Hosking's invention.

Prize Double Acrostics.

V.

A Scottish gulf; a German river;
A fight to be remembered ever;
A hill whose sides once streamed with blood
When Israel poured down like a flood;
A king who sat on England's throne,
And took a title erst unknown:—
In their initials there shall be
A name or armlet of the sea;
The fina's too, which you descry,
Shall yet another name supply.

VI.

Five lovely young maidens went walking one day,
And beguiled with their laughter the length of the way,
The first one assuming the air and the dress,
The grace and the name of an Eastern princess;
The second—a part of whose name may be seen
In that of a stern, bellicose British queen—
Fell into the far-spreading toils of a net
That had, in a frolic, been purposely set;
The third paused to pick a sweet flower in the dell,
And to list to the far-distant chimes of a bell;
Whilst the fourth, drinking in the delights of the scene,
Warbled gaily the strain of "The Young Adeline;"
And the fifth told the tale of her namesake of Greece
As oft as the soul-stirring music doth cease.

No doubt, lads and lasses, and old men and dames,
You will find out these maidens, and what were their names;
Their initials and finals, if all rightly cast,
Will aid you by giving the first and the last.

W. M. A.

PRIZE SOLUTIONS TO ACROSTICS.

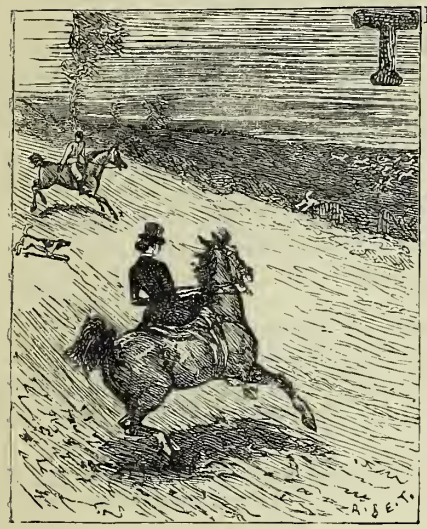
We shall now be happy to receive the solutions in verse of the whole set of six Prize Acrostics, under the conditions named on page 64 *(December Part). No solutions will be received after March* 31, 1881.

THE PROBATION OF DOROTHY TRAVERS.

By the Author of "In a Minor Key."

CHAPTER THE ELEVENTH.

BAD BEHAVIOUR.



THE curtain is just about to draw on the sixth and last tableau as Geoffrey makes his way into the drawing-room, to seek out Lady Travers. Within the doorway stand Joan and Lord Rushbury, and Geoffrey goes up at once to the former.

"I hope you did not think me very rude just now, Miss Travers. I am come to apologise——"

"I do not remember the circumstance to which you allude," Joan interrupts him, looking him full in the face, unpleasantly like her mother, with a shadow of the same sneer on her lip, as she deliberately turns her back on him, and ostentatiously recommences her conversation with Lord Rushbury.

For one moment Geoffrey looks surprised; the next, with a manner full as haughty as her own, he has made her a slight bow and passed into the drawing-room.

"My mother hopes so you will come; you will not disappoint her, Miss Travers?" Lord Rushbury continues in that low soothing monotone of his which, in his wife's lifetime, used to irritate Joan so much; but now it falls like balm on her troubled spirit, as she answers—

"I shall be only too pleased to come, Lord Rushbury. I think my mother can spare me, at any rate for two or three days, and I shall be glad of a change."

The sneer has disappeared from lip and eye, and Joan is herself again, only rather a meek quiet self. She sees Geoffrey in the distance confabulating very earnestly with Lady Travers, who looks more charming and youthful than ever in her costume for the last tableau, which, like the first, was a modern picture—Leslie's "Re-visiting School;" she sees her leave the room, the company breaks up into little knots and groups, every one is in ecstacies over the tableaux, the talk is general. As in a dream she hears Anne twittering to the baron, Sir Henry Ancaster's loud laugh, as he relates one of his frequently repeated "good stories," and through it all flows on Lord Rushbury's soothing stream of conversation, whilst immediately opposite to her, Geoffrey Ingram, tall and imperious—so, at least, it seems to her—leans against the mantelpiece, speaking to no one, the right Adam for her—Dinah.

Had she known his thoughts! Well for her that she does not. A man will pardon and excuse much in a woman: folly, vanity, unlimited silliness, deceit, untruthfulness even, but never temper; for the lords of the creation have a fancy for the monopoly of that article. Women in their eyes must always be gentle, loving, above all things sweet-tempered, and Geoffrey Ingram is no exception to his sex.

As he leans there against the wall he is busily employed in contrasting Joan and Dolly, sadly in favour of the latter, so young and sweet and fresh, who, without a sigh or murmur, had given up her evening's amusement for Ferdie's sake. And in this he does Joan injustice. She would have given up anything for the sake of those she loved, but the demon of Jealousy has crept into her heart, and she has become his willing slave.

Meanwhile she and Lord Rushbury have wandered into the conservatory; Lady Travers, smiling and gracious, has reappeared in the dress she had worn at the commencement of the evening; and every one, except the uninitiated few, is wondering what is to be the second part of the programme. For that there is to be a second part is well understood, and it only remains to be seen in what it is to consist.

Dolly's and Ferdie's absence is little noticed, if at all, whilst with sepulchral gravity Sir Augustus strives to enact the part of genial host, and takes one lady after another to partake of the refreshments laid out in an adjoining room, not unwelcome after the long sitting still.

Rose, with her flashing beauty, has managed to emerge from the comparative obscurity she has been condemned unwillingly to endure during the tableaux, and is quietly graduating in the art of flirting, in a corner of the dining-room, with the son of a neighbouring squire, whose looks betoken the admiration he feels. Not so poor Lou, a washed-out edition of her mother, but lacking all her charm of appearance and manner; she sits alone and unnoticed, too shy to leave her chair, like Rose, and mingle in the crowd, too bored and vexed to look otherwise than discontented.

"Quite a small affair," as Lady Travers has said, but all charmingly arranged, as anything she has to do with always is. With her presence everything seems to glide into its groove, and when the count finally seats himself at the piano, and the first notes of one of Beethoven's most popular sonatas are heard, the stragglers rally quickly from the dining-room. The chairs are once more filled, and a sudden stillness testifies to the pianist's power.

Lou alone looks cross. "She hates music," she mutters to herself. No one has spoken to her this

evening; no one has asked her to go into the dining-room; altogether, the world is not a pleasant one to her just now.

"Cross or hungry, Lou? which is it?" asks a voice at her elbow, and looking round, she espies Geoffrey, who has seated himself just behind her.

"Both, I think. I know I am very dull, and that—that I don't care to hear the count play one bit, and that I had better go to bed."

"Oh! there is no doubt that you are hungry. Nothing but hunger could produce such misanthropic sentiments. I suppose the schoolroom meal this evening was not very ample, eh, Lou? It is lucky that all this can be remedied, and in a quarter of an hour's time I will ask you if you are still in the same mind about retiring up-stairs;" and giving her his arm, he takes her straight to the dining-room, and is amused to see the frown on her face quickly replaced by smiles, as her wounded vanity is even more appeased by his conversation than her appetite by sandwiches and lemonade.

Poor Lou! Why is she always to be set on one side, she has been asking herself, whilst Rose gets all the admiration? Why is it that no one cares to talk to her, when Rose has always two or three around her? Now, however, her hour of triumph has arrived, and she immediately goes up several degrees in her own estimation, foolish child that she is. Geoffrey, the best-looking man in the room, she heard some one remark just now, and certainly the nicest—of that she is quite sure—is devoting himself to her, whilst Rose is gratefully accepting the attentions of that very ordinary-looking Mr. Newton. Decidedly she is better off than Rose.

Meanwhile Mr. Ingram, who would most certainly have done the same for Rose or any other girl had she been in a similar plight, and unaware of the truly feminine reflections passing through Lou's brain, is telling her all about Ferdie's fainting fit and recovery, dwelling, unconsciously to himself, upon Dolly's unselfishness and care of her brother. Lou, who has had some qualms of conscience as to whether she ought not to go up to Dolly and assist her, feels sufficiently reassured by the narrative to stay down-stairs, comforting herself with the reflection that no one can manage Ferdie as can his eldest sister, and that as he is recovered, she will no doubt be in the drawing-room again before long.

Happy and contented, she returns with Geoffrey to the other room, this time to listen with pleasure to the count's "recital," as Lady Mary Baillie calls it, as she welcomes her kindly to her side. Mr. Ingram is on her left hand, but has once more relapsed into unsociability, for, although he hears every note of the music he knows so well, his thoughts are elsewhere.

He misses Dolly, misses the sweet child-like face, the quick fancy, the bright imagination, as from time to time he addresses a remark in a whisper to Lou, which she is slow to take in. Is it that, or is it the misunderstanding with Joan that stamps that absent look upon his face, and causes him, with the first pause in the music, to rise from his chair, oppressed as much by his neighbourhood as by the heat, and wander into the conservatory? Stumbling first of all on Anne and the baron, and further on, on Joan and Lord Rushbury, he deems it wiser to beat a retreat, and is caught at the entrance by Lady Travers, who has had her eye on him for some time.

"Geoffrey, do you know you are behaving abominably to-night?" she says half jokingly, half seriously; "you are not helping me one bit, as you should. Devoting yourself either to a child like Lou, or else talking to Lady Mary, whom you have known all your life, you are absolutely of no good at all. I am sure your own conscience must endorse my accusations."

"Not altogether, in that it tells me I did a good deed in feeding a poor hungry, tired child; and as for the rest of the company, why, my excuse is that I do not know them."

"Oh, nonsense! You must know some of them; that is absurd. The Ancasters for instance."

"I ought, as Sir Henry is some sort of distant cousin of mine; but, as a matter of fact, I do not, and——"

"I will have no excuses. I shall introduce you at once. Now don't put on that face; Sir Henry is better than he looks."

Had Geoffrey spoken the truth, he would have answered that his mood was unsociable and misanthropic, and that he would rather be left to himself; but as it is, he merely pleads that he has a superabundance of cousins, and wants no more. Lady Travers, however, is inexorable, and in another moment he is being introduced, with every known detail of the relationship, to Sir Henry, Lady and Miss Ancaster.

At any other time he would have been very well pleased to make the acquaintance of this remote kinsman, but just now he feels hardly in the humour to cope with the flood of questions with which Lady Ancaster assails him, as to how he and Sir Henry come to be relations. He wishes he had never mentioned the unlucky word, as, step by step, he is taken back in his own genealogy, in order to arrive at the point where he and the baronet owned a common ancestress. He breathes more freely when the problem is fairly elaborated, but it is so much a matter of time that, at its conclusion, Sir Henry, perceiving that it is past twelve o'clock, and profoundly bored by the music, is in a hurry to go away. He carries off his wife and daughter to make their adieus to Lady Travers, and Geoffrey finds himself free to go where he pleases, so he saunters out into the hall for a breath of fresh air.

Casting his eyes upwards towards the gallery on which Ferdie's room opens, he becomes aware that some one is leaning over it, some one in a black dress. She does not see him, although he can see her; in a minute he is by her side, and Dolly starts to find the object of her thoughts standing within a yard of her.

"Well! how is the boy?" he asks, smiling at her evident pleasure.

"He is fast asleep. I have this moment left him, and he is quite quiet."

"Then we will go down-stairs, and you shall enjoy what little there is still left of the evening."

"Is the music still going on?"

"Yes; do you not hear it?"

"Now I do. Oh! how kind of you to come for me. I was just going to my room, for I could not make up my mind to come down by myself."

"Poor child! that would have been hard. Now, which will you do, go and listen to the music or have some supper?"

"The music, please. Oh! he is playing my favourite adagio. Let us make haste, or it will be over."

Together they enter the drawing-room, and subside into a little niche behind the piano, secure from interruption, hidden almost but not altogether from view. Joan sees them, as she sits a little apart, dreaming on her chair, lost in thought, and regardless of the music, and the sight does not tend to soothe her troubled mind. In perfect silence they listen to the "adagio," which turns into a breathless "presto," and with the last chords the count rises from the piano, and looks round him. There is a burst of applause, a vociferous clapping of hands, in some quarters deep-drawn breaths of relief that it is over, and then a general rising from the chairs, and other indications of breaking up. Geoffrey, strongly suspecting that his little companion has not eaten a mouthful the whole evening, hurries her into the dining-room, and almost before she knows what she is doing, has established her at a little round table, where he heaps all the dainties he can find on her plate.

They sit there a long time, talking of many things—of Ferdie and of the girls, of books and of places—until somehow they get to Geoffrey himself, and he tells her of his own life, of his invalid mother, who lived with him until her death five years ago, of the different countries he has visited, both in and out of Europe, finishing with a graphic account of Germany and the Germans.

"I wish you understood their language," he says, and Dolly mentally resolves she will learn it, with Rose's and Lou's assistance. "You must get Rose and Ferdie to teach you," he continues, "though now I dare say you have more than enough to do, without acquiring fresh knowledge."

"Oh! I will find time. Ferdie will help me, if I begin by myself, and Rose shall correct my exercises," with a bright little smile.

"And I will superintend your literature."

"Oh! it will be a long time before I arrive at literature."

"Not so very long. Do you remember how it was Macaulay acquired so many languages?"

"Yes, but then he was Macaulay."

"All the more reason for his method being good."

"Let me see, to-day is Thursday. I will begin on Monday, and lose no time."

"So when I see you again, you will read German fluently, and have learnt to appreciate its many treasures."

"When you see me again!" in a tone of dismay. "Are you going away then?"

"On Monday I return to Berlin. I have had my holiday, and must begin work again."

"Oh! I am so sorry," and Dolly plays with the jelly on her plate, in which she becomes suddenly interested.

Lady Travers comes into the room, a slight frown on her fair face, a glitter in her pale blue eye.

"Where is the count?" she asks. "Oh! Geoffrey, you will do as well. Will you please go and make yourself useful in putting the people into their carriages? Augustus has such a cold, I do not like him to stand at the open door, and as for all the other men, they are either gone or have hidden themselves. I will take care of Dorothy"—coldly—"who I fancied was in bed long ago."

Thus adjured, Mr. Ingram has no choice but to depart and do his hostess' bidding, but not before he has given Dolly a smile, which tells her he is coming back. In the hall stands a forlorn group of ladies ready to depart, whilst Joan and Anne are just issuing from the cloak-room. The baron is waiting to put them into the carriage. He offers his arm to Anne, and there is no mistaking the air of possession which accompanies the act. Joan is about to follow behind and alone, for, except Geoffrey, there is no other gentleman in the hall. Lord Rushbury has gone home a quarter of an hour ago. Mr. Ingram steps forward promptly, and silently offers her his arm, which is equally silently accepted, and she is handed into the carriage, where the "good nights" exchanged are of a very different description to those between the baron and Anne.

Returning in a few minutes to the dining-room, Geoffrey finds it occupied by a small array of black coats, not one lady amongst them. "Has the poor child been sent to bed?" he wonders, and repairs to the drawing-room, where he discovers the object of his thoughts standing a little apart from the few remaining guests, who are all bidding adieu to Lady Travers at once. The missing count has been found, and is at his hostess' commands, so Geoffrey feels himself released from attendance in the hall, and at liberty to do as he likes.

"Come and look at the conservatory: it is so pretty to-night," he says, going up to Dolly. "We shall just have time to walk round it before you are summoned to go up-stairs." Dolly puts her hand on his arm, and together they saunter into the charmingly-arranged retreat, where Mr. Ingram at once offers a chair to his companion, and seats himself by her side. But not for long are they to enjoy their *tête-à-tête*. Hardly have they exchanged a few commonplaces before they become aware of Sir Augustus' figure standing in the doorway. "All over," he says laconically, and waits to close the door behind them. Geoffrey rises, and turns to Dolly with an ill-concealed frown on his face.

"Well," he says, "this is the end, I suppose. Have you enjoyed the evening—that is to say, the little you have had of it?"

"Immensely. I never enjoyed anything much more. If it had not been for Ferdie being ill it would have been perfect."

They are in the drawing-room now; good-byes and

good nights are being exchanged, and Lady Travers orders the three girls to bed, whilst Geoffrey takes Miss Robertson to the carriage. He comes back to see the black dress receding up the staircase.

"Good night, Miss Dolly," he cries cheerily; and Dolly looks over the stairs and gives him a little nod and a smile. It fades from her face, however, as she reaches her room.

"Oh, dear!" she murmurs to herself, "he is going away. How sorry I am! What will Ferdie say?"

CHAPTER THE TWELFTH.

JOAN, LADY TRAVERS.

IT was some twenty-six years before the events hitherto recorded that Sir John Travers, Augustus' elder brother, brought his bride home to Wrangham.

It was a desperate love marriage, at the same time a perfectly suitable one in every respect, and, as far as any one could tell, the young couple had every chance of happiness. But Sir John was Augustus' brother, and, although less frigid, less selfish, still he was sufficiently so to be jealous and narrow-minded, and unfortunately Lady Travers had a temper—a hot temper, that blazed and flared up at the slightest word, brooking little control, resenting interference, and impatient of all restraint. At first Sir John was patience itself with his wife, forgiving her the frequent bursts of irritability—which she was apt to repent with an exaggeration as annoying as the original offence—giving her every indulgence, but expecting on his side to be obeyed. And it was just this obedience that she would not yield. She was a woman who, rejoicing in strong health and in a magnificent physique, was never happy without hard exercise of some sort or kind. To go out hunting, to walk miles through turnips and stubble with the guns, to drive unmanageable horses—in short, to do anything but stay at home and lead the conventional feminine life was her delight; and to all this Sir John, whose god was propriety, strongly objected. To all his remonstrances Lady Travers paid little or no attention; she would not give in to him, and he never ceased to protest against her hoydenism, as he termed it. Still they managed to get on pretty well together, for those were early days, and as yet their love for each other had not quite evaporated.

With the birth of Joan and Anne, Lady Travers was compelled to stay more at home, but she was terribly disgusted as the years rolled on that no son was born to her. Joan was her favourite, in that she shared all her own tastes, and from her babyhood loved to be surrounded by a pack of dogs or to be mounted on a pony or horse. Sir John was also deeply disappointed at having no heir, but he said very little about it; and, in contradiction to his wife, petted little Anne and snubbed Joan.

So things went on, as they do in so many houses, without coming to an open rupture, though Sir John would have laughed had any one reminded him that he was once desperately in love with his wife. Lady Travers hunted, rode, skated, drove—even smoked occasionally—and, as it was before the days when all these things are taken as a matter of course, the county was immensely scandalised, and she was pronounced on all sides dreadfully "fast." The accusation, which was agony to Sir John, caused her the greatest amusement. Her chief delight was to shock the great ladies of the county, who turned up the whites of their eyes at her goings on, and in whose presence she interlarded her conversation with slang that she seldom used at home. With men she was an immense favourite. Her beauty, her independence, and, above all, her really good kind heart underlying all her bravado, made her very popular with them. No man ever tried to flirt with her, but she could count many real friends among them, and at the head of the list stood Dick Rivers, the most popular man in the county, and the hardest rider.

At this period Sir John passed a great deal of his time in London or on the Continent, country pursuits being as uncongenial to him as was his own home; but when he was at Wrangham he used to take it into his head, from time to time, to upbraid his wife with her intimacy with Dick Rivers, and forget it half an hour afterwards.

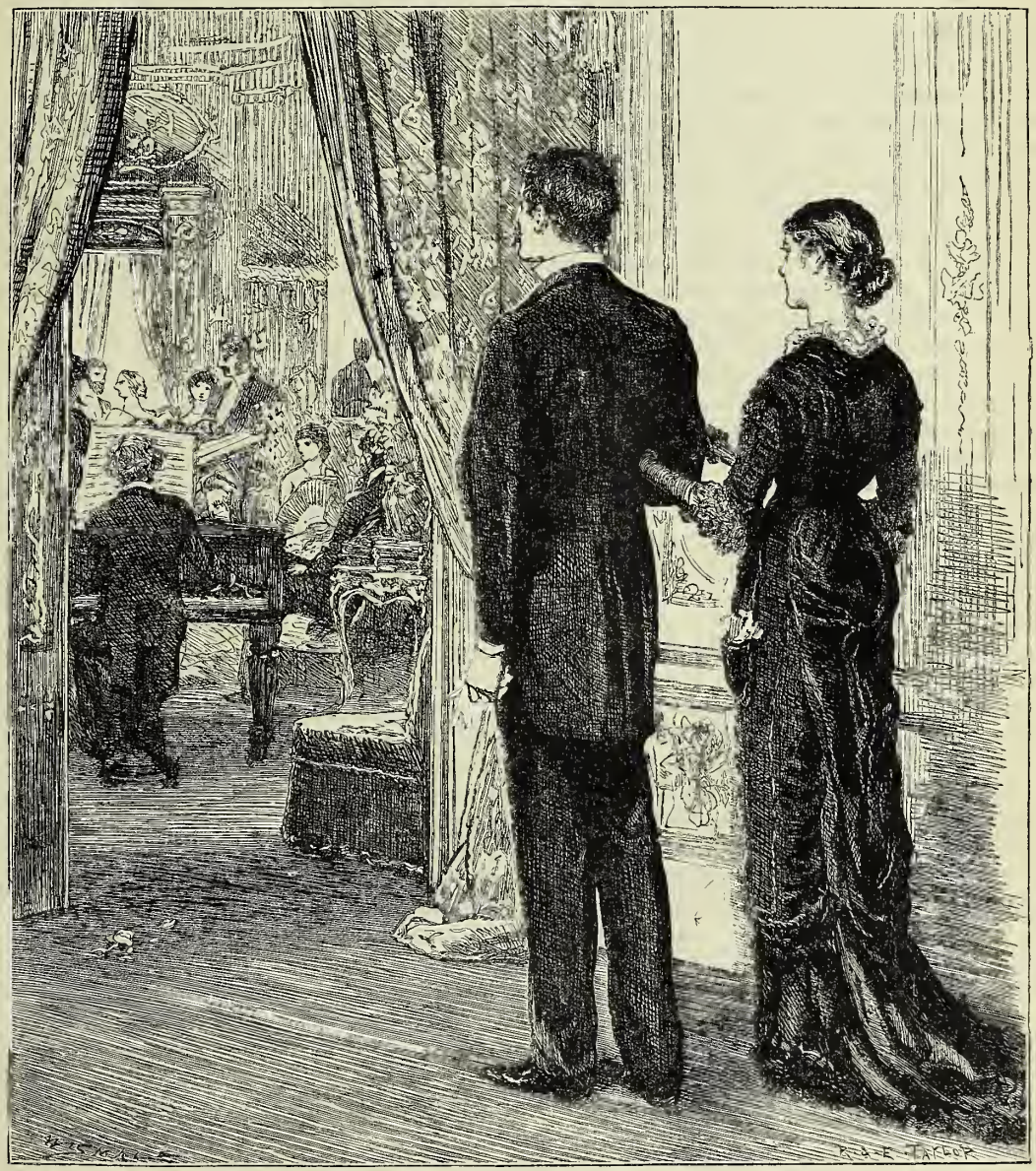
Matters had gone on thus for many years, and Lady Travers, as her children grew older, was beginning to see how bad for them, how bad for herself, how bad for her husband, was her mode of life, innocent as it was of anything vitally wrong, and laden with deeds of kindness and practical charity to her poorer neighbours. It was just then that Sir John, returning home from a long stay on the Continent, brought his brother Augustus on a visit to Wrangham, he having business to transact in England which required his personal supervision. The business, being a matter of law, protracted itself to an undue length, and Augustus' stay, which was to have been for a fortnight, extended itself over six weeks.

Lady Travers had met her husband and his brother at the station in a very amiable frame of mind, and determined to be conciliatory, but the very first hour spent with Augustus roused all the *esprit moqueur* in her; and the sight of his dull solemn countenance, his shocked look when she talked in truly masculine style of horses and hounds, made her give the reins to her fancy and indulge in unmitigated slang. Sir John looked disgusted; Augustus, speechless with horror, shuddered as he thought of what his poor brother must go through; and, aware of their indignation, and thoroughly enjoying it, Lady Travers grew worse and worse.

Throwing all her good resolutions to the winds, to be renewed and broken throughout the six weeks of Augustus' stay, she succeeded in making her husband more uncomfortable than he ever remembered to have been during the many uncomfortable days he had spent since he first brought Joan Harcourt to Wrangham as his wife. And when, later on, Dick Rivers appeared on the scene, talking to Lady Travers in a spirit of *bonne camaraderie*, utterly alien to Augustus' ideas of the intercourse between a lady and a gentleman, his disgust knew no bounds. For

over a month he listened and watched, until one day, Sir John giving him an opening, he spoke his mind, and quietly, insidiously suggested—what, no doubt, his brother wished him to suggest—a separation.

Lady Travers, little thinking of the storm that was



"TOGETHER THEY ENTERED THE DRAWING-ROOM" (*p.* 195).

brewing for her, and in her heart of hearts loving her husband warmly, as also her children, bade Sir John good-bye, when he and his brother departed to London for the winding-up of that business which had brought Augustus to England, with unusual warmth.

"Good-bye, my dear old Jack," she said. "Thank goodness, you are carrying off that solemn prig of a brother of yours. 'Pon my honour, I do not think the man knows how to laugh;" and she was about to embrace her husband, but he contrived to elude her, and coldly gave her his hand.

"Good-bye, Joan," he said. "There is very little in this house to make any man laugh, but much to disgust him;" and with these words he retired from the room, and entered the carriage that was to take him away from his wife for good.

When, a fortnight afterwards, Lady Travers received a letter from her husband's solicitor, notifying that Sir John wished for a separation from his wife, on the ground of incompatibility of tempers and of tastes, the blow fell on her like a bomb. So utterly unexpected was it that at first it literally stunned her, and when she came to herself her despair was terrible to witness. She wrote to Sir John a letter calcu-

lated to move the hardest heart, appealing to his former affection for her, to his love for their children, to his horror of making a scandal, promising to give up anything, and everything, if he would re-consider his decision. She received an answer from—Augustus.

Writing, as he said, for his brother, who had desired him so to do, the letter was as positively cruel a composition as a man of Augustus' negative character was capable of framing. Lady Travers' passionate appeals and protestations were not even noticed; the letter merely stated that Sir John, weary of constant insubordination on the part of his wife, was irrevocably resolved to part from her; that for the present, as he intended going a long yachting trip with a friend, she could stay on at Wrangham, and continue to live as usual; but that, on his return to England, matters should be put on a more business-like footing, when he would make her a handsome allowance, amply sufficient for her and Joan, whom she might retain to live with her, but Anne he should keep with him, in order that one at least of his daughters should grow up a gentle feminine woman. With this parting shot the epistle closed, and as Lady Travers read it she vowed eternal hatred to the author of it and to her pusillanimous husband who had not had the courage to answer her himself.

By this time her fury had spent itself, to be succeeded by a kind of dull leaden despair as her pride asserted itself, and forbade her to appeal any more to a man who found life with her intolerable. Quietly she acquiesced in his decision, in a letter full of dignity and pride, merely saying how bad it would be for Joan and Anne to grow up apart, and without, on one side, a father's, on the other a mother's care; and with that the correspondence ceased.

Sir John went yachting with his friend, seeking to drown the voice of conscience in the blue waters of the Mediterranean. Lady Travers stayed on at Wrangham, determined to sting her husband to the utmost by her reckless conduct, should it reach his ears; but, behold! the first time she went out hunting, mounted on a new horse, she, who had never known what fear meant, found herself evading jumps, seeking gaps, taking to the road, and finally, in abject misery, creeping quietly home, her nerve absolutely gone. She tried it again and again, each time with the same result, till she was obliged to confess that circumstances were too strong for her, and she must give in. Throughout the winter she remained a prey to nervous terrors of all kinds, till her friends, who knew nothing of what had occurred, were tired of wondering at the change in her, some charitable ones even going so far as to say that she was going melancholy mad.

Meanwhile Joan and Anne, ignorant of the domestic tragedy going on around them, pursued their education together, varied by constant quarrelling. It was no use denying it: the children did not get on well together. Joan was high-spirited, fearless, hot-tempered, and domineering; Anne quiet, inclined to deceit, cold, obstinate, and timid: a thorough Travers, as her mother contemptuously dubbed her, in spite of her undeniably sweet temper.

With the late spring Sir John returned to England, still hugging, with the obstinate pride of a weak man, his determination to be rid of his wife. To this end he instantly set to work with his lawyers to put everything on a perfectly business-like basis; and the first intimation Lady Travers received of her husband's return to England was an ominous-looking blue envelope, bearing the well-known handwriting of Mr. Edwardes, the senior partner in the firm of Edwardes and Blackett.

Until she had read it she did not know herself how much she had hoped that, during those six months abroad, Sir John might re-consider his cruel determination. The pointedly courteous epistle fell on her heart like a lump of ice, paralysing even her anger. Sir John intended living at Wrangham himself with little Anne, and Lady Travers might take up her abode where she chose; the means allowed her to do so were generous.

The affair, once set on foot, was very quickly arranged. With the blossoming of the first roses Lady Travers bade adieu to Wrangham and to her youngest daughter, who was to be allowed to spend three months of every year with her, and took up her abode in a pretty, old-fashioned house in an adjoining county, putting some fifty miles between herself and her husband. She would have liked to have hidden herself and her grief in London, but for her invincible repugnance to town life, her inability to breathe there, as she said, and her firm conviction that it would kill Joan.

When the news was first made publicly known it excited much interest and many comments. Numerous were the friends that rallied round Lady Travers, and most people were sufficiently just to allow that, although masculine and foolish, outspoken and brusque beyond the limits, there was nothing more to be said against her. In public estimation Sir John had not gained by his move, more especially with his men friends, at the head of whom Dick Rivers stood pre-eminent in honest indignation; but the whole affair soon ceased to be a nine days' wonder, and by the time Lady Travers had been installed in her new home three months, and little Anne had grown quite used to the absence of mother and sister, the Travers subject seldom came on the *tapis* of conversation, so completely had it been exhausted when in its first freshness.

At Hazel Hall, her new abode, Lady Travers led a quiet, secluded life, occupying herself chiefly with Joan, and shunning all society. Those amiable people who persistently sought her out very quickly repented having done so, for, without much ceremony, she soon intimated to them that she would rather be left alone. Far and wide she and Joan were known for being always accompanied by seven or eight dogs of all sizes and kinds; the leader of the herd, as they were dubbed, being a huge Russian mastiff (much resembling a brown curly bear) of most uncertain temper, the terror of the neighbourhood. Acting as a species of guard to his mistresses, he kept off all intruders, until Lady Travers' acquaintance in her own

rank of life was narrowed down to the clergyman of the parish and his family. Among the poor she was invaluable, overcoming their prejudices by the blunt determination of her will, and the real kindliness of her heart, her energy carrying all before her, until, one after another, she set on foot practical institutions in the village, which had been resisted for years.

The quiet and rest restored to a certain degree her nerve, and her favourite mode of locomotion was on horseback. Joan always rode a fat, steady cob, and accompanied her mother wherever she went. This same cob was quiet in harness, and was driven by Lady Travers or Joan in a pretty, light, two-wheeled pony-cart which Lady Travers had had built for her on principles of her own devising. By the irony of fate, she who had ridden and driven unharmed, all her life, horses that would have been terrors to ordinary women, was to meet with an accident that was to lay her up for life, when sitting behind the old cob, so steady and quiet that a little child might have held his reins.

It was one very cold autumn afternoon, as she and Joan were returning late from a long drive, about three years after her parting from Sir John, when Joan was about seventeen years of age. It was getting very dark, a sudden mist had risen, and Lady Travers, afraid that her daughter might catch cold, was driving Vishnu, the black pony, as fast as she could, mindful only of the pace, and heedless of what lay in the way. A huge stone, jutting out from the hedge, escaped her eye in the darkness; it caught the wheel of the carriage, and in a moment Lady Travers and Joan lay precipitated into the hedge, Joan on the top of her mother. Little hurt, the former scrambled up immediately, but not so Lady Travers. Poor old Vishnu, as frightened as they were, had moved on a few paces, and the wheel had gone over her mistress. Fortunately, neither she nor her daughter lost their heads; Joan, with her fresh young strength, dragged her mother from under the carriage, and set her up against the bank, whilst she shouted lustily for assistance, despatching Bruin, the mastiff, home for help with a childlike reliance on his sagacity, and power of making himself understood. She had not to wait long. Two labourers, hearing her call, quickly appeared on the scene, and with their help Lady Travers, who had fainted, was carried to a neighbouring cottage, from whence she was conveyed home in the course of the evening to Hazel Hall, never to be the same woman again. All that the best advice, the best nursing could do for her, was done, but in vain. Paralysis set in, and the remainder of her days the once active, energetic woman was condemned to pass on a sofa.

All Joan's best qualities came out in this emergency; her devotion to her mother knew no bounds; for weeks she never left her side, till, her own health beginning to fail from want of the accustomed exercise, the doctors imperatively ordered her into the open air. At the time of the accident she had written at once, without consulting any one, to her father to acquaint him with what had happened; but he and Anne were travelling in America, so the news did not reach them for some time, and even then they had the journey home to accomplish. On their return to England, they immediately set out for Hazel Hall, appearing there shortly before Christmas, to Joan's intense delight. Sir John bade her prepare her mother for his arrival, and nothing doubting but that he would be welcome, she repaired at once to Lady Travers' bedside without misgiving. To her astonishment and grief, her mother, her naturally unforgiving temper heightened by pain and suffering, refused to see her husband, and so absolutely, that Joan, fearing to agitate her, did not press the point. Sir John spent a week in the house in case his wife should change her mind, and then returned to Wrangham, leaving Anne behind to share the nursing with her sister.

From that day Lady Travers remained chained to her couch, a cynical disappointed woman, unable to submit herself to the terrible blow that had fallen on her, and yet withal warm and impulsive at times, as in the days when she first married Sir John. The latter, in his heart grieved at his wife's accident, and at the life-long misery he knew it would entail on her, busied himself in preparing for her and his daughters a truly comfortable home in the event of his own decease. He chose it in the vicinity of Wrangham, thinking that in their own part of the world the girls would be more appreciated and would get better society than elsewhere; also the poor invalid woman would find plenty of old friends who would rally round her in her trouble.

Augustus was safe at Lisbon, and Sir John might give way to his better nature, so the old farmhouse was bought and beautified, the grounds prettily laid out, with the assistance of Anne, who, at her own request, continued to spend the major part of the year with her father, and who brought a refined, elegant, though perhaps not very original, taste to bear on the subject. The stables were arranged with every modern convenience; and the Lodge, as the place was named, became Sir John's pet hobby. He and Anne would potter down there every day, standing about among the workpeople, suggesting this, arranging that, and then go home to think of some fresh improvement, till the new acquisition gradually developed into the most luxurious of little abodes. When it was at length finished, tenants had to be found for it, till such time as it would be occupied by Lady Travers and her daughters. For Sir John was fully persuaded that he was a short-lived man, on which fact he grounded his anxiety respecting the completion of the dower house and his daughters' future. So thoroughly was he imbued with this idea, that he would only let the Lodge on a yearly lease, in order that at any time his wife and daughters might take possession of it when he should be gone, and Augustus should have come to reign at the Manor. Strange to say, he was right in his prognostications, for he was not much over fifty when he caught a severe cold, and, after some anxious weeks, died of inflammation of the lungs. It was a lingering illness, which, from the first, gave symptoms of terminating fatally; and when Lady Travers heard of it, she yielded at last to Joan's entreaties, and to her

own intense desire to see her husband once more, which for years her indomitable pride had overruled. Accordingly, she was transported from Hazel Hall to Wrangham, where she met with a warmer reception than she on her side had accorded to her husband. For the few days Sir John had to live, the husband and wife were together, the old quarrels forgotten and forgiven, the old sores healed, while both occupied themselves with the future of their girls. It was settled that Anne was to live with her mother and Joan at the Lodge, and Sir John had the satisfaction of dying at peace with his wife, and at rest on the subject of his favourite daughter's future.

Lady Travers moved into the Lodge with the accession of Augustus, with whom she was strongly inclined to quarrel. Yielding, however, to her better nature, and mindful of her daughters, to whom the society at, and the intercourse with the Manor, might prove an advantage, she consented to remain on friendly terms with her brother-in-law and his family; at the same time intimating to Augustus that the less she saw of him the better pleased she should be. The new Lady Travers, whose maxim was never to quarrel with any one, would not suffer Sir Augustus to take offence at his sister-in-law's openly expressed dislike, and by this means the harmony between the two families was maintained, and Joan and Anne found Wrangham a very pleasant resort.

To Anne, who was like a duckling introduced into a hen's nest, with her mother and sister, the society of her uncle and aunt and their friends was apparently the only thing she cared about, and most of her time was spent at her old home, where she was always sure of a kind reception. With Joan she had not a single thought in common, and, accustomed for many years to be her own mistress, she lived very much to herself, sitting for hours in her bedroom, intent only on one purpose—to get married, and away from the Lodge, as soon as ever she could. Her mother meant to be kind, but her blunt downrightness, amounting at times to coarseness, jarred on Anne as it had formerly on Sir John, and caused her to shrink ever more and more into her own shell. Joan was willing enough to be friendly to and fond of her sister, but Anne's cold lymphatic nature was by no means sympathetic to her; and as time passed on, it came to a tacit agreement between the two, that each should go her own way, independently of the other.

Anne's way was to spend as many hours as possible in bed, to dawdle through the morning with a little playing, a little singing, a little fancy-work or reading—with much meditation on the subject of her next new dress—and to spend her afternoons at the Manor. Joan's was to be up with the lark, to manage all the housekeeping, teach in the schools, visit the poor, scold the idle and negligent, reform abuses, write innumerable letters, attend to her mother, look after their little farm, walk, ride, or drive miles to the outlying parts of the parish, or to visit some neighbour, and to go to bed with an exceedingly stiff book under her arm. It followed, as a matter of course, that their two paths did not cross, and except for being mutually irritated at each other's proceedings, they were very good friends.

The night of the tableaux at the Manor, the two sisters drove home to the Lodge in perfect silence, neither speaking a word till they parted at their respective rooms, when Joan said, "I am thinking of going to Rushbury for a few days, the day after to-morrow, Anne; you will look after mother, won't you?" Anne quietly assented, and retired into her own room, inwardly wondering why Joan was going to Rushbury, and why she and Mr. Ingram had been so strange to each other all the evening. But she had plenty to think of on her own account, and little time to waste on Joan's affairs. This evening, in the conservatory, sitting behind the orange-tree, the baron had proposed to her and she had accepted him. How would her mother take it?

It kept her awake the better part of the night, and the next morning she was only down-stairs just in time to tell Lady Travers what had happened when she perceived the baron entering the Lodge gate. There was not the slightest hesitation on Lady Travers' part.

"You may go down on your knees all day and all night, Anne," she spoke out decidedly, "I shall never sanction the engagement;" and when Anne murmured something about being of age—"I know you are of age," she continued, "and, of course, you may do as you like, but you will never have my consent to, or blessing on your marriage with a foreigner; and if you marry the baron, I never hold any intercourse with you again. Now, do as you please."

She was even more peremptory and decided with Von Stieglitz himself, who, all politeness and filled with fervour, came to plead his suit for Anne's hand. She would hardly listen to the little man, but bade him seek a wife in his own country, and not be such a fool as to think he would be happy with an Englishwoman. Finally, she told him sternly that she would listen to no more pleading, her mind was made up, and it only wasted her time and his to continue the subject.

Fairly frightened by her vehemence, and thinking she was indeed an awful specimen of an Englishwoman, the baron fled from the Lodge and sought counsel from his friend—the charming, gentle Lady Travers. She was all sympathy, all softness, committing herself to nothing, but gently suggesting that, if he saw Anne again, they might agree on some line of conduct which might soften Lady Travers' heart; and, fortified by her words, the baron betook himself to the plantation, where he had not to wait very long before the object of his thoughts appeared.

That path between the larches had been trodden more than once by the two; but this afternoon they plunged into the thick of the trees, and heedless of wet feet, sauntered arm-in-arm among the slender stems. The baron gave the whole conduct of affairs to "wise little Anne," as he called her, not without reason; and, after an hour's cogitation, she announced that she began to see daylight.

"The way to mamma's heart is through Joan," she said, "and I think I have found the means whereby I may gain Joan's co-operation."

The baron looked at her with admiration as he took leave of her.

"You have a wise head, carina," he said; "I trust to you entirely. Yes," he murmured to himself as he trod his homeward way, "yes, a wise head and a good fortune."

CHAPTER THE THIRTEENTH.

CONFIDENCES.

"JOAN, will you come into my room this evening? I want to talk to you."

The speaker is Anne, standing on the landing outside her bed-room, the light from the candle she holds in her hand falling full on her studiedly passive and impassible countenance, as, with the last volume of an enthralling novel under her arm, she lays a detaining hand on Joan's sleeve.

"Anne," responds the latter, visibly agitated, "I so entirely agree with mother on the one subject you wish to speak of, that I think it would be wiser for us not to discuss it."

They are standing now facing each other, and there is a certain air of suppressed hostility on either side, yet Anne does not move a muscle.

"I think you mistake me, Joan," she answers very quietly. "I was going to talk to you about something quite foreign to my own poor little affairs—about Dolly Travers."

Joan gives something of a snort.

"Dolly Travers," she says. "What can you have to tell me about a child like that?"

"Only that she is not quite such a child as you imagine. If you had seen what I saw yesterday—but never mind, dear, you want to get to your book," glancing rather disdainfully at the thick volume of Stuart Mill which Joan holds in her hands, "so good night;" and smiling sweetly, Anne nods to her sister and turns the handle of her room-door.

"Wait one minute, Anne; you need not be in such a desperate hurry," says Joan. "Provided we keep clear of that one subject—you know what I mean—I do not mind brushing my hair in your room to-night."

"Do as you please, Joan. I am just at the *dénoûment* here," tapping her book, "and I shall be only too pleased to finish it. Come or not as you like," and Anne retires finally victorious into her room, leaving Joan burning with curiosity.

Just at this moment she regards Dolly as her arch enemy. Has she not lured Geoffrey Ingram from herself, and is she not the main cause that she was so madly rude to him last night? She thought she should have liked that child, but it is something akin to hatred she feels for her just now: poor Joan, who can do nothing or see nothing in moderation, who has mistaken the unmeaning preference for herself on the part of Mr. Ingram for love, which she returns with all the warmth of her passionate nature, and who sees in poor innocent little Dolly a very snake in the grass.

So she meditates as she prepares to brush her hair in Anne's room, and the latter, who has been employing her time in contemplating a very dramatic-looking photograph of the baron, is surprised to see her sister reappear with such celerity, inquisitive as she well knows her to be.

Joan drops into an easy chair, trying to look as though she had not come for a special purpose; but her natural honesty overcoming the pretence, she asks at once—

"Well, what is this wonderful story about Dolly?"

Anne looks up from her book, and ostentatiously turns down the page she has been reading.

"Poor little Dolly," she says softly, "she is full young to begin such practices. I fear those people at Holme Regis must have brought her up very badly."

"But what has she done, Anne? What is her crime?"

"If you will give me time, dear, I will tell you. What do you think of a child of that age meeting a young man clandestinely in the woods, walking up and down with him in the most confidential manner, and finally parting with him with—well, every demonstration of affection—what do you say to that, Joan, for your pretty *protégée?*"

"Dolly is no *protégée* of mine, Anne. I took a fancy to her at first and felt sorry for her, foreseeing that Louisa would probably make a tool of her; but I see she is perfectly well able to take care of herself, and that there are mitigating circumstances to being governess to those children, so I have ceased to pity her. Yet I am sincerely sorry to think that she is thoroughly unprincipled. And who was the man?"

Anne smiles softly as the question is brought out with ostentatious nonchalance, but with wide-open eyes and an eager expectancy of the answer.

"Guess, dear," she responds, with aggravating deliberation.

"How can I guess? I am not acquainted with Dolly's friends."

"No?"

"Of course I am not. The only man we know in common is Mr. Ingram, and I hope and think he is too much of a gentleman to meet a little girl like Dolly clandestinely."

Anne is appeased. She has forced Joan to mention the name she was so unwilling to utter.

"Your confidence is not misplaced. It was not Mr. Ingram."

Joan's face lightens as the sky lightens when the clouds roll away.

"Oh! poor little Dolly!" she exclaims, in accents of real compassion; "I am sorry for her. After all I suppose it is only what one can expect of Uncle Gus's daughter. Rose will be just the same. Did you notice her last night with young Newton? But to return to Dolly. When and where did you witness all this, Anne?"

"It was yesterday afternoon, when, as you know, I went up to the Manor about my dress. As I thought the woods would be wet after all the rain we have had, I took the outside path which skirts them, and was making my way home when I heard voices. I looked through the hedge, and there, to my amaze-

ment, I saw Dolly and a young man I did not know, walking arm-in-arm in the most loverlike fashion."

"What was he like?"

"A fair, curly-haired, boyish man about twenty-one, I should say, with a wide, good-humoured face, and dressed in a badly-made tweed suit, of the same identical pattern as Mr. Ingram's."

"And did you let them know you saw them?"

"Oh, dear, no; it was no business of mine."

"You should have done so, Anne. It was neither right nor fair not to make your presence known."

"At any rate, I did not do so. I am not high-minded like you."

"I am not speaking of high-mindedness, merely of acting with common honesty."

"If you do not approve of what I did, I will not pursue the subject any further." Then suddenly remembering, "Dear Joan," she continues, "please do not take to your moral stilts, but recollect that you have to do with a very inferior mortal like myself."

"Go on with your story then, Anne, and I will not interrupt you any more."

"Well, when the two came to the end of the path, the young man pulled out his watch and then proceeded to bid adieu to Dolly, with all the rites and ceremonies of a *fiancé*. That is my tale. What do you think of it?"

"I could never have believed it of Dolly—never! She looks such a sweet, candid little thing. And to think she is going on with two men in this way. It is quite shocking."

"Two men, Joan!" with an air of innocent surprise. "Who is the second?"

"If you have not found out for yourself, Anne, you must be blind."

"To tell you the truth, I take no interest in girls of Dolly's age, they are so dull, so I have not heeded this iniquitous little cousin of mine."

"Begin to heed her now, then, and you will soon discover what I mean."

"I will indeed, for she promises to become an interesting study. And now we will drop Dolly," with a yawn, "and talk of something else."

"But, Anne, we ought to tell Uncle Gus or Louisa."

"Certainly not, Joan; it is no affair of ours. Let the Manor people manage their affairs, and we ours; but there must be no interference on either side, or there will ensue a conflagration."

"Perhaps you are right," with a sigh, "and yet poor silly little Dolly ought not to be trusted with Rose and Lou."

"When I am married," says Anne, calmly and irrelevantly, "I suppose I shall see a great deal of Mr. Ingram, as he and Adolf are both at Berlin. It will be very refreshing to find an Englishman there one knows. I wonder if you will come and stay with me then, Joan."

"Dear Anne," says Joan affectionately, "I candidly dislike the idea of your marrying a foreigner, and I consider the religious objection an insuperable one."

"Again, Joan, that is my own affair. I shall never be happy with any one else but Adolf. Will you not plead my cause with mother? It would be a great happiness to me to have a home of my own and some one to love me as dear papa did."

"Poor little Anne!" says Joan, putting her arm round her sister's waist, and feeling remorsefully that perhaps she has not been as kind to her as she might have been, "poor little thing! I will not oppose you, and perhaps—only perhaps—when I know more of the baron, and like him, I may use my influence with mother on your behalf. At present I do not relish the idea of a foreigner for a brother-in-law."

"You will relish it, dear, when you come and stay with me at Berlin. Now," playfully, "I shall send you to bed."

The two sisters embrace each other with unusual affection, and Joan leaves the room. Somehow her heart is ten degrees lighter than when she entered it; her feeling for Dolly is no longer that of hatred, it has given place to a pitying contempt. Sooner or later Mr. Ingram will have his eyes opened, and then—— At this point in her meditations she seizes her book and begins to read.

Anne sits over the fire with the photograph still in her hand, and smiles demurely to herself.

"Poor dear Joan! how transparent she is, and fancies no one has found her out! and now she has quarrelled with Mr. Ingram. She certainly has a wonderful knack of spoiling her own prospects, but she shall not spoil mine if I can help it." With which sage resolution Anne thinks it is time to go to bed.

The next day nothing is said on the subject of either Dolly or the baron, although Joan feels much disturbed in her own mind on both points. First of all, whether it is not her duty to administer a lecture to Dolly on the sinfulness of her proceedings; secondly, whether she ought to plead Anne's cause with her mother or not; thirdly, shall she go to Rushbury or stay at home. The latter question is settled when a note is brought over from old Lady Rushbury to Lady Travers with a pressing invitation to Joan, which her mother insists on her accepting. She is not unwilling to go; she feels that she wants a few days to herself away from family complications; besides which, with her natural love of interference, she is quite sure she can suggest some scheme for the better management of the ten little Rushburys who weigh so heavily on their father's mind. So, with an earnest recommendation to Anne to look well after their mother, Joan departs without accomplishing any of the missions she had thought it her duty to fulfil, and without even seeing Dolly.

Meanwhile, the latter, with much trepidation—for Sir Augustus' silence is as alarming as a torrent of words—has informed her father of her meeting with Harry, has been most severely reprimanded for it, and, having so far done her duty, feels tolerably light-hearted, although she wakes of a morning with the idea that something unpleasant is about to happen. Ever since the tableaux, Ferdie has been in a highly nervous state, and is never happy unless she is with him. Consequently she does not stir out of doors, but sits in the school-room reading and singing to him, playing

with him, and telling him stories throughout the day. Lady Travers looks in from time to time, and thinks to herself how fortunate she is in having such a tractable step-daughter, and meanwhile the amusements go on down-stairs—music and games and billiards—no one wastes a thought on Dolly, but Geoffrey Ingram, and now and then the count.

Geoffrey, however, is a privileged being. He may go into the school-room at all times and hours, and of this privilege he continues to avail himself frequently, looking in after his day's hunting or shooting, and cheering poor fretful Ferdie with some story, some card-trick or amusement with which he draws from him a sickly smile. And these quarters of an hour are looked forward to by Dolly as much as by Ferdie, for they are interspersed with scraps of conversation that link the girl with the outer world; and that, after being accustomed to intercourse with a man like Mr. Bruce, she feels the need of when living only with children. So the few remaining days of Mr. Ingram's visit pass swiftly by, and it has come to the Sunday; to-morrow he goes up to London, and from thence back to Berlin.

The baron is still at the Manor, but he too takes his departure on the Monday, and meanwhile his engagement to Anne remains in abeyance: that is to say, Lady Travers has given her ultimatum. She still obstinately and absolutely withholds her consent, but Anne must do as she likes—chained to her sofa, she cannot possibly control her daughter, therefore she must take her own course. So the two meet every day in the woods, and Anne preaches patience, and is very hopeful; and the little baron employs his time in drawing out a neat scheme of his genealogical tree, which, with its far-spreading roots diving down into the Middle Ages, is destined to awe Lady Travers into surrender. He has more ancestors than money, and does not feel as patient as does Anne under the circumstances, but he recognises the wisdom of her words, and consents to bide his time.

Such a bright frosty Sunday, which makes Dolly long to go out after her three days' imprisonment, but which chills poor little Ferdie, and makes him doubly fretful and cross. He will not hear of Dolly leaving him to go to church; he indignantly repudiates any suggestion that Rose or Lou, Gretchen, or even his mother, should take her place; Dolly, and Dolly only, shall stay with him; and she, feeling in her heart that the child is far more ill than Lady Travers will admit, consents readily to remain with him, soothing him back to his normal fretful calm, and is rewarded by his pathetic "I do love you so, Dolly." So she sits with him all the morning, gives him his dinner, and remains up-stairs with him, whilst Rose and Lou are learning manners in the drawing-room. Out of doors the sun is shining brightly, the birds are singing cheerily, the sky is blue; there is a delicious crisp frosty feeling in the air; it is a wonderful day for November. Dolly has just finished her lunch, and is gazing rather wistfully out of the window, when the door opens, and Geoffrey Ingram comes in.

"I thought you were never coming to see me," exclaims Ferdie crossly, his face, nevertheless, brightening perceptibly.

But Geoffrey answers nothing, only shakes hands with Dolly, and seats himself by the child.

"Such a beautiful day, Ferdie! you must let your sister go out."

"I can't let Dolly go, I'm too ill. She is very unkind to think of it. Some day, Dolly, when I am dead, you will be very sorry you have been so cruel."

"I won't leave you, darling. I don't want to go out."

"Yes, you do," says Geoffrey quietly; "and you had better put on your things at once whilst it is still bright, and have a walk before church."

Ferdie's eyes glisten, and he strikes Geoffrey with all the might of his poor weak little fist.

"You shan't send Dolly away, you shan't."

Geoffrey imprisons the two little hands in his own, making a sign to Dolly to refrain from further petting.

"Not if I stay with you in her place, Ferdie?"

"You?" answers Ferdie with half a sob, the result of choked-down passion. "Yes, I like you, but I will not have Gretchen, or Rose, or Lou, or mother; they all worry me, and no one is like Dolly or you."

"Oh! Mr. Ingram," interposes Dolly, "do not, please, think of such a thing. I can easily stay with Ferdie; he will be better to-morrow, and then I can go out."

"But I have a particular fancy for staying with Ferdie," answers Mr. Ingram, "which I mean to indulge."

"It is so kind of you! I will not go out until it is time to dress for church, and come in directly it is over, so that you must not think of spending the whole afternoon here."

"Don't be rebellious, Miss Dolly. Go out at once and get a good walk, and leave me with this young man. I have a secret to tell him, and I am anxious to have him to myself." Dolly gives him a sweet, grateful little look, and in five minutes more is walking down the drive, revelling in the sweet fresh air and the freedom, with Rose as her companion.

"By-the-bye, have you heard the news?" asks the latter, when they have been out about a quarter of an hour.

"No," responds Dolly. "What is it?"

"It is rather a secret, so do not repeat it. Lord Rushbury"—her voice sinking to a whisper—"has proposed to Joan, and she has refused him. Is it not silly of her? He is very rich indeed, and Rushbury is such a lovely place!"

"But if she does not care for him?" answers Dolly. "Who told you, Rose?"

"Anne; she is with mother now. It seems Joan is coming home to-morrow, all in a bustle, instead of waiting till Thursday as originally intended. Anne is very angry and even Aunt Joan is vexed, and well they may be."

"I think Joan is quite right," maintains Dolly stoutly; "besides, Lord Rushbury has ten children. Fancy poor Joan a stepmother to ten children, and very naughty children too, from their father's account of them."

"Mother says it is positively wrong of Joan to refuse

him. I think"—with an air of superior wisdom—"that she must be in love with some one else."

"Perhaps she does not like to leave Aunt Joan," suggests Dolly, "but, whatever her reason, if she does not wish to marry Lord Rushbury, why should she?"



"SHE DESPATCHED BRUIN, THE MASTIFF, HOME FOR HELP" (*p.* 199).

"He is very rich," responds Rose with glistening eyes, "and she would be Lady Rushbury, and have, oh! such lovely diamonds."

Dolly's lip curls disdainfully. She is at the age when diamonds do not yet appeal strongly to the imagination; but just then they reached the churchyard, and the conversation ceases abruptly. But she cannot shake off an uncomfortable conviction that Rose is a great deal too wise for her age. She herself, three years older, is all for love and folly, and Rose at fifteen talks with the wisdom and prudence of a woman of thirty.

Meanwhile Ferdie, secure of Geoffrey all to himself, determines to make the most of him, and the first half-hour or so is spent in story-telling, drawing pictures, and so on; but the child is soon tired of each amusement, and finally throwing his pencil and paper on one side, he says—"Let us talk. You told Dolly you had a secret to tell me. What is it?"

"Will you promise to keep it to yourself?"

"Yes; I promise you faithfully I will."

"It is not much of a secret, Ferdie, and I am afraid you will be disappointed."

"You only said that, then, to make Dolly go out. Oh, I know; you won't take me in."

"I never expected to do that; but I really do want a talk with you by myself. Do you know, Ferdie, that you are growing a regular little tyrant to your sister, and that you would like to keep her sitting by your sofa morning, noon, and night."

"No, I don't. She has Rose's, and Lou's, and Gus's lessons, and I see very little of her, and I hate you."

"Oh, no, you don't. You are very fond of me, and you are very fond of Dolly too."

"You ought to call her Miss Dolly."

"Don't be a prig, Ferdie. As I say, you are very fond of your sister, and yet for three whole days you have not allowed her to breathe a mouthful of fresh air."

"I never breathe fresh air myself, at least very little of it in the winter."

"That is no reason why she should not. She looks quite pale to-day, for she has been accustomed to be out of doors a great deal all her life, and you would like to mew her up in this schoolroom with yourself for as long as you are kept in. Now, do you know, that is very selfish?"

"I am not selfish; you are. I hate you. I will tell Dolly; I will ask mother. Go away, I hate you."

"All right," answers Geoffrey, "I am going," and he rises from his chair and moves towards the door.

"Don't go," says the piteous little voice, "I am very ill."

"No, my boy, I will not go if you will be good and listen patiently to what I have to say; but the next time you put yourself into a passion I leave the room instantly. I mean it."

"You are very—— Yes, I will be good."

"Of course you will," stroking the soft, fair hair, "for you are quite wise enough to see the truth of all I have been saying."

"I love Dolly dearly."

"I know you do; you could not help loving her, she is so good and kind to you; but you do not love her enough to give up anything for her sake, and yet she gives up walking, and riding, and driving, and the music the other evening, all for you."

Ferdie rears himself up from his couch and looks Geoffrey full in the face.

"Geoffrey," and the little hand is laid caressingly on Geoffrey's sleeve, and the voice sinks to a whisper, "Geoffrey, I believe you are in love with Dolly."

"Don't talk nonsense, Ferdie."

"I believe you are, and, oh! it would be so nice if you married her, so very nice. But you must not take her away until I am dead, for I could not spare her. But I shan't live very long; I know quite well I shan't, so you need not shake your head; and then you could marry her, and live very happily ever afterwards. You don't know what a darling she is, and I am sure she is quite lovely; and you would be awfully kind to her, and pet her, for you know no one here really cares for her but I. Mother pretends to be fond of her, but she does not love her one bit; only I don't tell Dolly that."

Geoffrey has let the boy run on, his little face all aglow with the charms of his own castle in the air, whilst he has sat by his side with an amused smile, listening to his prattle. The castle in the air is not without its fascinations. Has Ferdie, with those wise blue eyes of his, seen more than Geoffrey knows himself? Has he unlocked the key of his heart, and exposed to him what lies there, of which he is hardly aware?

To the eager inquiring words and glance, he returns no answer.

"Don't be an *enfant terrible*, Ferdie," he says at last, "you are too old for that now; try and be sensible. What makes you say you will not live long?"

"Oh! I know I shan't."

"But how do you know it? do you feel worse?"

"No, I feel much the same as usual, but—this is a secret, promise me you won't tell it."

Geoffrey promises.

"Do you remember when I was so very ill, two years ago?"

"Yes."

"And there was that great English doctor in Berlin?"

Geoffrey nods his head.

"Do you recollect, there was a consultation between him and the German doctor?"

"Yes."

"Well, I heard them say to each other, when they thought I could not hear, or at any rate understand, that I could not possibly live long anyhow."

"And you have kept this to yourself all this time, Ferdie?"

"I often tell mother I shall not live long, but she always says I must not be fanciful. You will not tell, Geoffrey, will you?"

"No, certainly not, my boy. I only hope and think that you must be wrong, and that you misunderstood the doctors. You were such a little fellow two years ago. Anyhow, you must remember that the greatest men often make mistakes, so, when next I see you, I trust I shall find you much better and stronger. And now, Ferdie, you must give me a solemn promise in return for mine. You must promise me faithfully never to talk the nonsense to Miss Dolly that you have to me this afternoon."

"About your being in love with her? Oh, no! I will not; it would not be proper."

"Proper or not, you must keep your tongue in order. Give me your word, Ferdie."

"All right, I promise; but you will marry Dolly, won't you?"

The door opens, and Dolly puts in her pretty head.

"Here I am, my boy," and she kneels down by his sofa and kisses the little fair face, "though I am sure you have been very happy with Mr. Ingram, without me."

"Yes, we have been awfully jolly; we have been telling each other secrets—have not we, Geoffrey?"

"Yes, state secrets."

"Have you?" asks Dolly, taking off her hat and jacket, and seating herself in her customary low seat, "have you? Won't you tell them to me?"

END OF CHAPTER THE THIRTEENTH.

A BRIDAL SONG.

DOST thou linger, gentle maiden,
At the minster door?
Dost thou tremble, tender maiden,
On the chancel floor?
Dost thou fear, and dost thou falter,
When thou kneelest at the altar?
With the bridegroom by thee now
Wilt thou take the marriage vow?

If thy heart, O loving maiden!
Thou hast given away,
Without fear, O trustful maiden!
Give thy hand to-day.

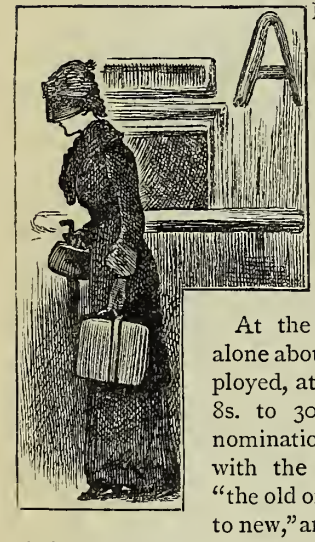
Leaving father, leaving mother,
Give thy life unto another,
Taking back a dearer life
From his love as wedded wife.

Let him lead thee, wedded maiden,
From the altar now.
Thou art his for ever, maiden,
By that marriage vow.
His in joy and sorrow ever,
None these holy bonds may sever.
Loving, trusting, stand beside
Him who loves thee, happy bride!

J. F. W.

LADY CLERKS IN THE CITY.

BY THE AUTHOR OF "HOW WOMEN MAY EARN A LIVING."



ANY habitual traveller on the Metropolitan Railway must have been struck by the large number of regular lady passengers by the business trains. These ladies I find, on inquiry, are for the most part employed as clerks in the City.

At the Central Telegraph Office alone about 500 female clerks are employed, at rates of pay varying from 8s. to 30s. a week. Hitherto the nomination of candidates has rested with the Postmaster-General, but "the old order changeth, giving place to new," and Mr. Fawcett announced his intention, in his place in Parliament, after the present list of candidates (which I am told is but a small one) is exhausted, of throwing all appointments open to public competition. An exception will, I understand, be made in favour of counter-women, who are invariably selected from telegraph clerks.

The Government is evidently of the opinion that married women should find quite sufficient to occupy them in their home duties, and that the task of providing an income should rest solely with the husband, as directly a lady clerk marries she is compelled to resign her situation, and only single women are eligible for appointment.

The most distinguished of the Government offices open to ladies is the Receiver and Accountant-General's office. Here the lowest salary paid to the fortunate clerks is £40 a year, and the highest remuneration they receive is £150. The hours of work are from ten to four, with an hour's interval for luncheon. At the handsome new buildings in Queen Victoria Street, where the office has lately been removed to, the accommodation is all that can be desired, and there is a restaurant on the premises where refreshments can be obtained.

The authorities are liberal enough to supply the telegraph clerks with tea and bread and butter free of charge, but this favour is not extended to the other branches of the service. The reason the telegraph clerks are so privileged is that their work has to be done at different hours. Their services may be required at any time from eight in the morning until eight at night, but they never work more than the regulation eight hours a day. They are not eligible for nomination after the age of eighteen, and when they have passed the present test examination, they have to attend the Post Office Telegraph School to undergo a course of instruction in Telegraphy. With an intelligent pupil this generally lasts about three months; during this time, of course, they do not receive any pay, but on the other hand they are not charged for the instruction they receive.

The clerks employed in the other Government offices enter upon their duties, and commence to receive their salaries, directly they have passed their preliminary examination, as they do not need any special knowledge. No one is appointed who has passed the age of twenty, and they cannot be nominated, excepting for telegraph clerks, before they are seventeen.

With a view to limiting the number of candidates when the appointments are thrown open to public competition, there is some idea of making it compulsory that all applicants shall have passed one of the well-known public examinations, such as the Oxford or Cambridge local; but the conditions of candidature are not at present finally decided upon.

The Prudential Assurance Company gives employment to a large number of ladies—somewhere about 170; they are all the daughters of professional men. This rule was at first made to limit the number of candidates, as the directors only contemplated employing perhaps half a dozen; but as these were found to do their work satisfactorily, and business increased, the staff of lady clerks was increased also. The authorities have as yet seen no reason to alter their rule; no doubt it has excluded many eligible clerks, but the number of candidates is always so large that there is no difficulty in selecting suitable ladies from the privileged classes. Many names have been on the list of applicants for the last two years; vacancies occur but rarely, as for once girls seem to know when they are well off, and seldom leave excepting to be married.

No one is engaged under the age of seventeen or over thirty; the girls require no special qualifications beyond an ordinary English education. Their duties consist principally in copying and writing letters from notes, so they do not even require a knowledge of book-keeping.

Any girl wishing to earn her own living may consider herself extremely fortunate if she can do so under the auspices of the Prudential Assurance Company. The arrangements are simply perfect. There is an excellent restaurant, solely for the use of the ladies, where a very fair dinner may be obtained for the moderate sum of eightpence; a capital library, containing all the newest books, which may be taken to read at home; a piano is also provided: this naturally may not be played during office hours, but any girl who likes may stay to practise until seven o'clock. Once a week during the winter, and once a fortnight during the summer, a choral class is held for the musical members of the staff, and every fortnight all the year round an elementary class for those not sufficiently advanced to join the other. These are both conducted by Mr. E. S. Such, and twice a year, under his presidency, the members give concerts; to these all the other lady clerks are invited, and generally some of the directors, with their families, attend.

The flat roof of the building has been converted into terraces, where the girls may take exercise during their luncheon hour, and very much they enjoy it. These terraces have been arranged to afford shelter whichever way the wind may blow, and are entirely free from the possibility of being overlooked. Skipping is the favourite amusement. It is, no doubt, difficult for the uninitiated to believe that there is any place in the heart of Holborn where fifty girls or more can indulge in this recreation in the open air, and in the middle of the day, without attracting inconvenient attention. I very much doubt if their nearest neighbours are even aware of their existence.

They are provided with a separate staircase to that used by the male clerks, and any attempt at flirtation is sternly discouraged. No one is allowed to absent herself from her duties for more than three days without a doctor's certificate, and if they are ten minutes late in the morning they are fined.

The bank holidays entail extra work upon the following days; for this they receive extra pay and their tea; even on these occasions they are dismissed at seven o'clock, as that is considered quite as late as they should be out alone. In this matter the directors show an almost paternal interest, preferring, if possible, to employ sisters, so that they may chaperon each other on their way to and from the office; and in the event of their having to depend entirely upon their own exertions, their combined salaries would give them a modest competency, and perhaps allow them to make some pleasant excursion to the seaside, or if they were very economical indeed, they might even venture on a trip abroad during the fortnight's holiday each clerk is allowed. It is, no doubt, a great advantage to the girls that they all belong to the same class, as there is less likelihood of undesirable acquaintances being formed. During my visit I congratulated the lady superintendent upon having such an attractive and lady-like set of girls under her charge. Her post must indeed be no sinecure, as the difficulty of managing a large number of women together is proverbial, and I am afraid the fact of their being ladies is not likely greatly to lessen that difficulty.

Messrs. Kelly and Co. employ about twenty-five young ladies to assist in compiling their directories. It is very interesting to see them at work. None of their duties require any technical knowledge, so they begin to receive their salaries from the commencement of their engagements; but the very greatest care and neatness are absolutely requisite. The lady manager is also very severe in the matter of legible writing, sternly discouraging all the flourishes and various ornamentations most of the young ladies are at first inclined to indulge in. She likes them to come to her when they are about fifteen or sixteen years old: in fact, directly they leave school, as she finds at that age they are most easily taught their duties. All applicants should, if possible, provide themselves with a private introduction; if that is impossible they must apply by letter.

These lady clerks revise all the information collected by Messrs. Kelly and Co's. canvassers, comparing it with the last edition, and make all the necessary corrections for the printers. They also arrange the useful alphabetical lists at the end of each volume, sorting the names from the sheet lists which are brought to them by the collectors; besides this, they cut out addresses from the old directories, and with marvellous neatness stick them on to pieces of paper to be sent to each householder for correction. Directing these circulars and sticking on the stamps is by no means a light task. A short time ago two young ladies were engaged the whole of one day in sticking on three thousand six hundred stamps. A large board is thoroughly wetted with a weak solution of gum, on this a sheet of stamps is placed, then each stamp is carefully taken up with a penknife and transferred to an envelope.

Mr. Kelly, until recently, employed boys for these tasks, but they proved so troublesome and so inordinately fond of play that he made up his mind to try girls, and it has proved a most successful experiment. During the six years which have elapsed since he first

employed them only two have been dismissed; and it is an almost unheard-of thing for them to leave of their own accord, excepting to be married.

The hours of work are from half-past nine until half-past five, excepting on Saturdays, when they leave at four. They are allowed an hour in the middle of the day for their dinner, but they must bring it with them, as they are not allowed to leave the office during business hours.

Messrs. Baring and some other large banking firms employ a few women clerks as coupon-sorters, but the demand for them is so very small that it seems scarcely worth while to mention it. It is quite essential that all aspirants to this work should have remarkably keen eyesight, and they are not taken without the very best references. As a general rule, the preference is given to the relations of the male clerks. The hours of work are from ten to five.

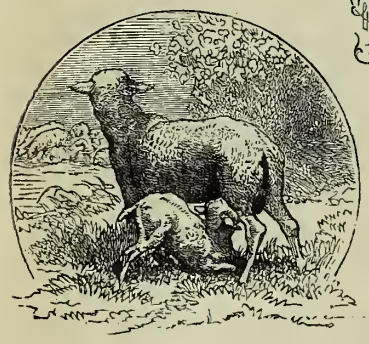
The Junior Army and Navy Stores employ ladies as clerks; if possible, the manager always chooses daughters of military and naval officers. They are expected to have a very thorough knowledge of book-keeping, besides a legible handwriting; so for these posts some previous training is usually necessary, as the average young lady's knowledge of arithmetic upon leaving school can scarcely be said to be thorough, though I am glad to hear that more attention is being paid to this branch of education, and that at some of the large day schools for middle-class girls even book-keeping forms a regular part of the ordinary course of study.

It is always an advantage for girls to begin any profession they may intend to adopt immediately upon leaving school, before they have acquired the pernicious habit of wasting their time, which is almost inevitable without some definite occupation.

The state of things I have attempted to describe is surely very different from what it was some fifty years ago; and if the number of women dependent on their own exertions has increased to the extent that statisticians wish us to believe, surely the possibilities of their supporting themselves in a suitable manner have also increased to an extent sufficient to encourage the zealous advocates of the higher employment of women with the conviction that some of the most substantial advantages which they have been striving to secure have been silently granted almost without a struggle.

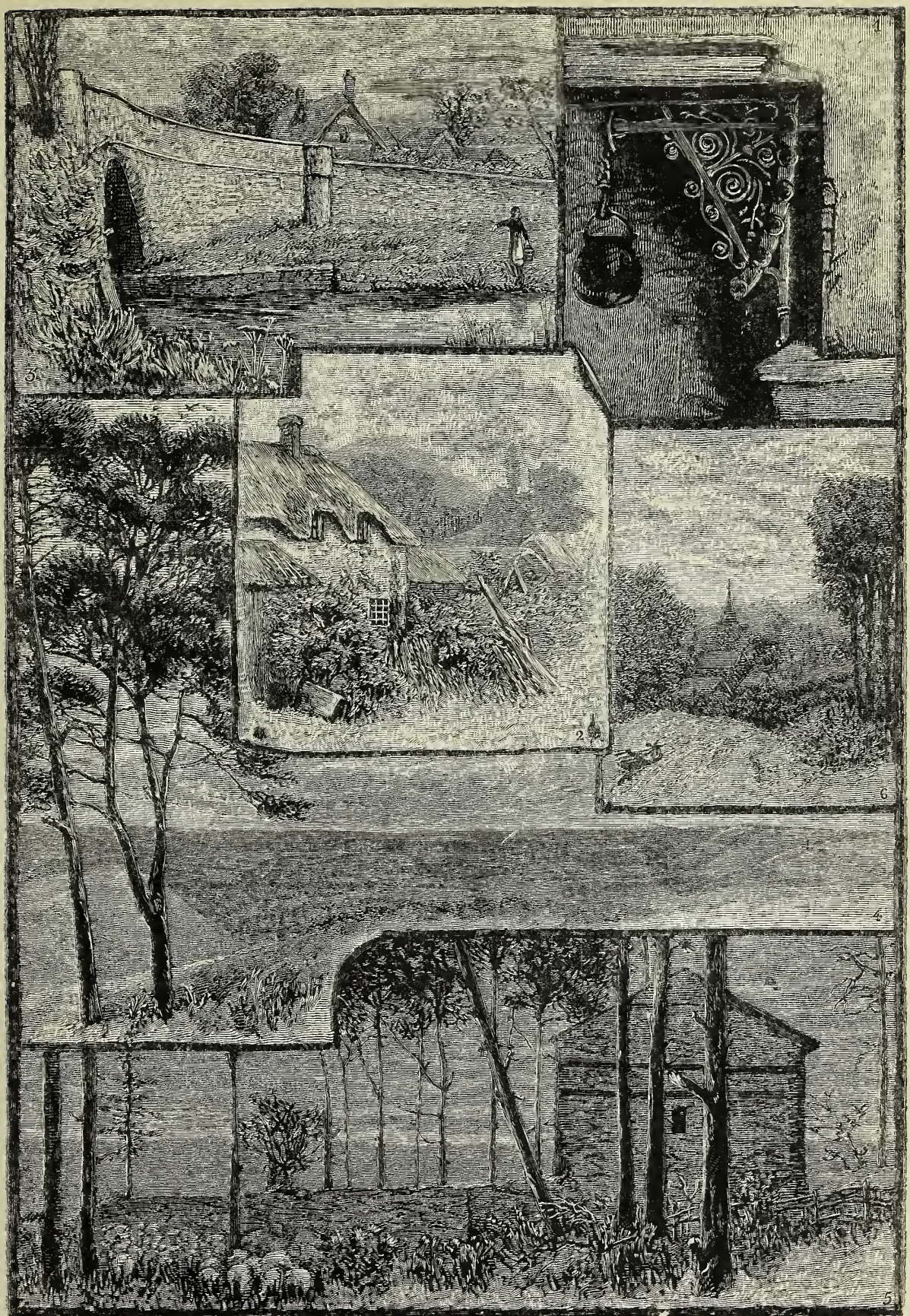
MERCY GROGAN.

A RAMBLE ROUND AND ABOUT PEWSEY VALE.



THE Vale of Pewsey, so well known to agriculturists for its corn-growing capacities, is a longitudinal depression, extending for somewhat more than twenty miles from east to west, and varying from two or three to ten miles in breadth, the widest part being towards the west. It lies entirely within the county of Wilts, its eastern extremity verging on the borders of Hampshire, and stretching westward across nearly two-thirds of the former county. It is almost equally apportioned between North and South Wilts, the western half belonging to the former, the eastern to the latter division. A curved line drawn across the valley from St. Martin's Hill on the north, to the *debouchure* of the Avon Valley on the south, would roughly mark the boundary line between the two Divisions of the county at this point. The valley is bounded in on all sides, except the south-west, by long continuous ranges of chalk hills, with outlets, through which in most cases small water-courses run, on the south, south-east, and north-east. It bends slightly round at the latter point, and by a narrow prolongation is united to the marshy valley, drained by the Kennet, which extends throughout the length of Berkshire. The hills to the south form the northern boundary of the Plain of Salisbury, and have no southern slope, properly so called, the land from their summit stretching away, plateau-like, in gentle undulations, like the petrified waves of a tempest-tossed sea. Those to the north and east are, for the most part, boldly defined, and on their further side overlook magnificent tracts of the most beautiful agricultural scenery. These hills form part of the North Downs, and are excellent pasture grounds for the innumerable flocks of sheep that browse their mossy verdure, and for which this district is so justly celebrated. For the most part they run along the borders of the valley in gently curving lines, and at a tolerably regular elevation, but rise at times suddenly to rounded eminences of greater height, from which splendid views of the valley and the surrounding country can be obtained, the whole appearing spread out like a map at the feet of the spectator. From below, these heights form interesting and conspicuous features in the landscape. They are more often than not crowned with clumps of lofty firs, and, before the days of the electric telegraph, were probably often utilised as convenient positions for the beacon fires, whose flickering radiance spread around for many miles the intelligence of great events anxiously and expectantly looked for, in hope or fear, in times of emergency and danger.

Many of these summits bear on their scarred brows the remains of ancient British or Roman earthworks, and numerous Druidical tumuli are scattered along the neighbouring Downs, or in the hollows beneath their shadow. A solemn stillness reigns around, broken only occasionally by the distant tinkling of



1. CHIMNEY CORNER, BURBAGE. 2. VILLAGE OF OARE. 3. BRIDGE AT WILCOTT. 4. THE VALE.
5. THE SHEEPFOLD ON ST. MARTIN'S HILL. 6. VIEW NEAR PEWSEY.

the sheep-bells, the barking of the shepherd's dog, or the bleating of the flocks. And in the pervading calm, the free air beating softly and balmily against our fevered brows, our minds revert with wondrous strength to that long-ago past, upon whose very footsteps we are treading, surrounded as we are by the many relics of its warfare and religious superstitions. The numerous clusters of trees marking the site of some quiet hamlet, the far-stretching woods, and the long lines of hedgerows intersecting each other in all directions, seem again the forest abode of our ancestors ; the smoke curling upwards here and there through the branches, is that arising from their wattled huts ; and we people the vale again in our imagination with the forms of the brave men whose ashes lie around us, awaiting the fierce onslaught on yonder entrenchments, within whose formidable enclosures encamp the Roman legions by whom they have been "conquered, not subdued."

> "For by the Druids taught that death but shifts
> The vital scene, they that prime fear despise,
> And, prone to rush on steel, disdain to spare
> An ill-saved life that must again return."

Yonder on the north-west of the valley is Roundaway Down, about a mile and a half to the north of Devizes. Here, on the 13th of July, 1643, the Parliamentarian forces were defeated by the Royalist troops. Some miles to the east is Huish Hill, where the remains of ancient subterranean dwellings were discovered some little time since. Oare Hill comes next, the little valley underlying which is extremely picturesque, being almost surrounded by steep hills, and forming by far one of the prettiest "bits" of rural scenery in the neighbourhood. Not far from here is St. Martin's Hill, with its Roman camp and entrenchments, and further to the east, the elevation gradually lessening from this point, extend those continuations known locally as Leigh Hill, Durley Hill, and Wolfhall Hill. Overlapping the three latter can be just discerned the southern edge of Savernake Forest. The hills to the east extend from the height known as Inkpen Beacon (1,017 feet above the sea), past Shalbourne and Bottle Hills, to the downs overhanging and almost surrounding the retired little hamlet of Tidcombe, where they turn sharply round to the west, and run along, except at the *débouchure* of the Bourne river, in almost a straight line past Wexcombe, East Grafton, and Everleigh Downs, and the Easton and Pewsey Hills, as far as the Salisbury Avon, whence they continue in irregular curves to the south-west, under the names of Cleeve Hill, Wilsford Hill, and Little Cheverel Down.

The valley is drained by numerous small streams, the affluents of the Kennet, and the two Avons. The Bourne rises near the two villages of Collingbourne, and, flowing in a south-westerly direction along the eastern edge of the Salisbury Plain, joins the Avon at Salisbury. The last-mentioned river itself, by means of its numerous affluents, drains the entire centre of the valley, as the Bristol Avon does its western extremity, and passing out through a depression between the Cleeve and Pewsey Hills, winds its serpentine course through the rich and picturesque valley of the Avon.

About eighty years ago the Kennet and Avon Canal was constructed as a means of through-water communication between London and Bristol, and passes through the entire length of the valley. Until within the last fifteen years considerable traffic in heavy goods was carried on by this route, but since the opening of the Berks and Hants extension railway about that time to connect the lines which hitherto stopped short at Hungerford and Devizes, its usefulness has considerably diminished, and it is now comparatively little used. Its different levels are reached by a system of "locks," which are very numerous in the part extending between Hungerford and Wootton Rivers. The highest "reach" during its entire course is that immediately below Wolfhall Hill, and to keep it navigable the water is forced up to it from a lower level by means of a "feeder" and powerful engines situated at Crofton. Numerous brick-built bridges cross the canal in its course, of which the accompanying sketch of one at Wilcott, near Pewsey, will form a fair representation. At Savernake Station, not far from Burbage, and underlying the railway at that point, the canal passes through a tunnel about three-quarters of a mile in length, named after the noble family of "Bruce," whose stately mansion in Savernake Park is not far distant.

We have already mentioned one railway passing through the valley. Another, a branch line to Marlborough, is connected with it at Savernake. This is in course of extension both ways—to reach Swindon on the north, and towards the south to run transversely across the valley to Collingbourne, and thence to Andover, thus effecting a much-needed through-communication with the systems north and south of the country.

Of the many excellent highways that intersect the vale in all directions, the most important is that running along its central part and branching out in diverse directions towards its extremities. It may be mentioned as an interesting fact that the "Hope" coach—a veritable remnant of the "good old coaching days"—traversed this route daily in its journey from Devizes to Hungerford until the opening of the railway between these towns in 1863. Good roads, many of them extremely picturesque with their high fern and flower-covered banks, and the branches of oak and elm interlacing overhead, strike out from it here and there, and bring within the traveller's easy reach the clustering homes that nestle together in some pleasant hollow, or beside some meandering brook, or right away—

> "Far from the busy haunts of men"

—beneath the shadow of the distant hillside. Many of these roads are evidently those which have been used for centuries, and an old Roman road, probably *Ermin Street*—constructed to connect Southampton and St. David's—crosses the valley at its eastern end. It may also be mentioned here in passing that the famous ancient British entrenchment

known as the *Wansdyke* cuts the valley at almost the same point, and skirts its northern boundary for many miles.

As might be expected, every place in the valley—even the towns—wears a decidedly agricultural aspect. There are few manufactures, and the prosperity of the larger villages and towns mainly depends on the patronage bestowed on them by the folks of the "country-side." But wherever the traveller turns his footsteps he cannot fail to meet with much to interest and to please—quaint villages with their rustic greens, and timber-built, straw-thatched cottages; the moss-grown windlass-wells close by; the venerable churches, whose grey walls remain with little alteration as they existed in pre-Reformation times; the surrounding churchyards, heaped high with the accumulated dust of centuries, and darkly overshadowed by the far-spreading branches of yews coëval with the sanctuary; the faded remnants of ancient halls and lordly avenues; the ivied cottage; the busy mill; the well-stocked farm; and above all, those glorious fields of waving corn that spread their richness in golden sheets over the whole length and breadth of the valley. All around, wherever we go, we are met by the sights and sounds of joy and industry, and sweetness and beauty; the air is redolent of health—fresh, pure, and invigorating; and in the exhilaration of the moment we almost involuntarily give expression to the joyful words of the Psalmist, nowhere so fully and so forcibly exemplified as here: "The valleys also shall stand so thick with corn that they shall laugh and sing."

W. Maurice Adams.

HOW WE MANAGED OUR BAZAAR.



THERE was not anything to individualise our bazaar from other fêtes of a similar nature often held for charitable purposes during the summer months in the grounds of country-houses; but by the time our arrangements were made and successfully carried out, we had picked up sundry pieces of experience and information, the possession of which *at starting* would materially have lightened our labour; and having then neither one nor the other, a paper in Cassell's Family Magazine treating of fancy fairs would have been most welcome. It is to a desire to supply with a few hints any of our readers who may have such an undertaking ahead of them, by briefly describing how we managed ours, that this article owes its origin.

A bazaar in a town is a comparatively easy thing to get up, and has little enough excuse for not being a success. There will be a town-hall or other public building all ready for the purpose; the buyers (a very necessary item) are living close at hand, and whether it be wet or dry, can turn in for an hour or so in the afternoon or evening, make their purchases, and leave again; refreshments are therefore not absolutely necessary.

In the country, on the other hand, the weather is an autocratic master of the ceremonies. The principal purchasers are naturally to be looked for in the ranks of the fair sex; but in ladies' dictionaries "bonnet" comes before "bazaar," and should rain seem imminent, they will not, unless specially interested, drive in an open carriage, perhaps several miles, running the risk of spoiling their bonnets through having their feathers taken out of curl, or getting their velvet trimmings spotted, merely for the purpose of emptying their purses on things which, as a general rule, can *not* be classed among the necessaries of life. Attractions additional to the actual bazaar have to be provided, to draw the public from a distance and coax out their superfluous shillings; tents are a *sine quâ non*, a band ditto, and a public tea can scarcely be avoided. A refreshment-stall also is far from being unlikely to pay, for stuffy marquees are conducive to thirst, and suggestive of lemonade and ices; and a saffron bun is a capital bait for a rural appetite in quest of something nice.

Having obtained the consent of some charitably-disposed ladies to hold stalls of, say, the value of £50 each (ours ranged from £100 downwards), the next thing is to see about the tents. These we hired of the following dimensions:—

Bazaar tent	90	feet by	30 feet.
Entertainment do....	100	,,	30 ,,
Tea do.	60	,,	30 ,,
Refreshment do.	30	,,	15 ,,

The hire of the four, agreed upon beforehand, was £21. This being inclusive of fixing, we anticipated having no trouble about *them*; but, as a matter of fact, we found the man in charge had so few and incompetent hands to help him, and the work of erecting was progressing so slowly, that to expedite matters, on the afternoon before the event, we procured a contingent of our neighbours' gardeners, and deducted their hire from the estimate.



1. BAND STAND.
2. REFRESHMENT TENT.
3. TEA TENT.
4. BAZAAR TENT.
5. ENTERTAINMENT TENT.

For the bazaar-tent a few sets of signal-flags, hung in festoons, supplied all the requisite decoration. The stalls were plain strong tables, nine feet by three feet six, borrowed for the occasion: deal boards were laid on the grass behind them to keep the vendors' feet dry. The adornment of the stalls was left to the stall-holders—each to trim her own—who agreed that workhouse-sheeting was preferable to cretonne as a material for covering, and that crimson braid would be a cheap and effective binding for the same. Behind every stall, standing upright against the canvas of the tent, was a large clothes-horse, as is shown in the drawing, answering the purpose of a frame on which to display pieces of work, pictures, brackets, &c., too large to go on the stall itself. There were five stalls, exclusive of the flower-stand. One or two ladies as assistants at each of the stalls, who are no strangers to the art of making people buy what they do not want, and some men good-natured enough to spend an afternoon carrying about the more valuable knick-nacks, with raffle-papers and pencils in their hands, are two important factors in the success of any bazaar. A graceful, well-dressed girl in charge of a flower-table laden with rooted ferns, palms, and other hot-house plants, which she offers to a discriminating public at *reasonable* prices, should not fail to command a lion's share of patronage.

The same description of things are to be seen exposed for sale at almost all bazaars, and our wares did not include any striking novelty. Crewel-work being all the rage, we had specimens of it sufficient, if need were, to carpet the whole tent. These unfortunately did not meet with that appreciation which they deserved, and which was desirable; indeed, we could have wished that those friends who kindly volunteered to "work something" for the several stall-holders, had borne in mind that the ornaments of an English drawing-room are not restricted entirely to antimacassars. What sold really well were good pieces of *vertu* (glass and china), water-colour and oil sketches, watches, candlesticks, &c. The admission-fee was sixpence, which kept the tent only comfortably filled till the evening; then the public were admitted free, and crowded round the stalls, admiring everything, but over-scrupulous about buying any trifle that was not offered them at least fifty per cent. under cost price.

The refreshment stall bade fair to be a difficulty. Pastrycooks were to be found in the small towns ready to bring all the refreshments we desired, and give us a liberal allowance in the pound, provided we consented to take the remainder off their hands. Not having an idea whether the day would prove wet or dry, whether people would come in their tens or their hundreds, and whether those who did come would be hungry or the reverse, that was out of the question. At length, however, the problem of feeding the multitude was solved by an offer from a confectioner on more advantageous terms. He supplied ginger beer, &c., at trade price, giving us the whole profit thereon; supplied light refreshments and ices, allowing us twenty per cent. of the money taken, and took back what was left; and supplied besides, for the tea, 200 pounds of

cake, at 5d. per pound, and 300 "splits" (tea-cakes); agreeing to take back, if the day should turn out wet and few people came, one-fourth of the former. In the course of the afternoon relays of ices, lemonade, &c., were brought into the bazaar tent, and readily consumed.

For the public tea there were six tables, held by as many matrons of the parish, each providing, at her own expense, one pound of tea (they brought more, to be on the safe side), two pounds of butter, the same quantity of sugar, a gallon of milk, and china enough for twelve persons. Price of admission—adults, a shilling each; children, sixpence. One of the tables was in readiness before the others, so that the band, and after them the minstrels, might have their tea and clear out before the tent was thrown open to the public.

Subjoined is the programme of the proceedings :—

Bazaar opened	at 1.30	p.m.
Conjuror's performance	,, 2	,,
Christy Minstrel do.	,, 3	,,
Band tea	,, 4	,,
Minstrel do.	,, 4.30	,,
Public do.	,, 5	,,
Conjuror's performance	,, 5	,,
Christy Minstrel do.	,, 6	,,
Conjuror's do.	,, 7.15	,,

The entertainments consisted, as will be observed, of three performances, lasting half an hour each, by a well-known conjuror, who was specially engaged; and two, of one hour each, by a troupe of local amateur minstrels. This tent (as is seen in the sketch) was purposely placed at a long distance from the band-stand, so that the noise of the tambourine and bones might not mingle with the music of the band, to the detriment of both. A stage was made at one end of the tent, nineteen feet by nine, of rough battens (lent us on condition of their being returned uninjured), supported, at an elevation of about four feet, by short fir posts driven into the ground. Behind the stage a screen of canvas and flags, divided in half, formed dressing-rooms for the performers. The admission to this tent for each entertainment was sixpence.

As soon as the daylight waned the stalls were stripped, and the unsold bric-à-brac packed up; yacht-sailors appeared, to take down and claim their flags; weighty money-bags were handed in by those who had been posted at the tent entrances, gardens, and lodge-gates; and on the morrow followed the satisfactory *finale*—counting the proceeds. So terminated our bazaar.

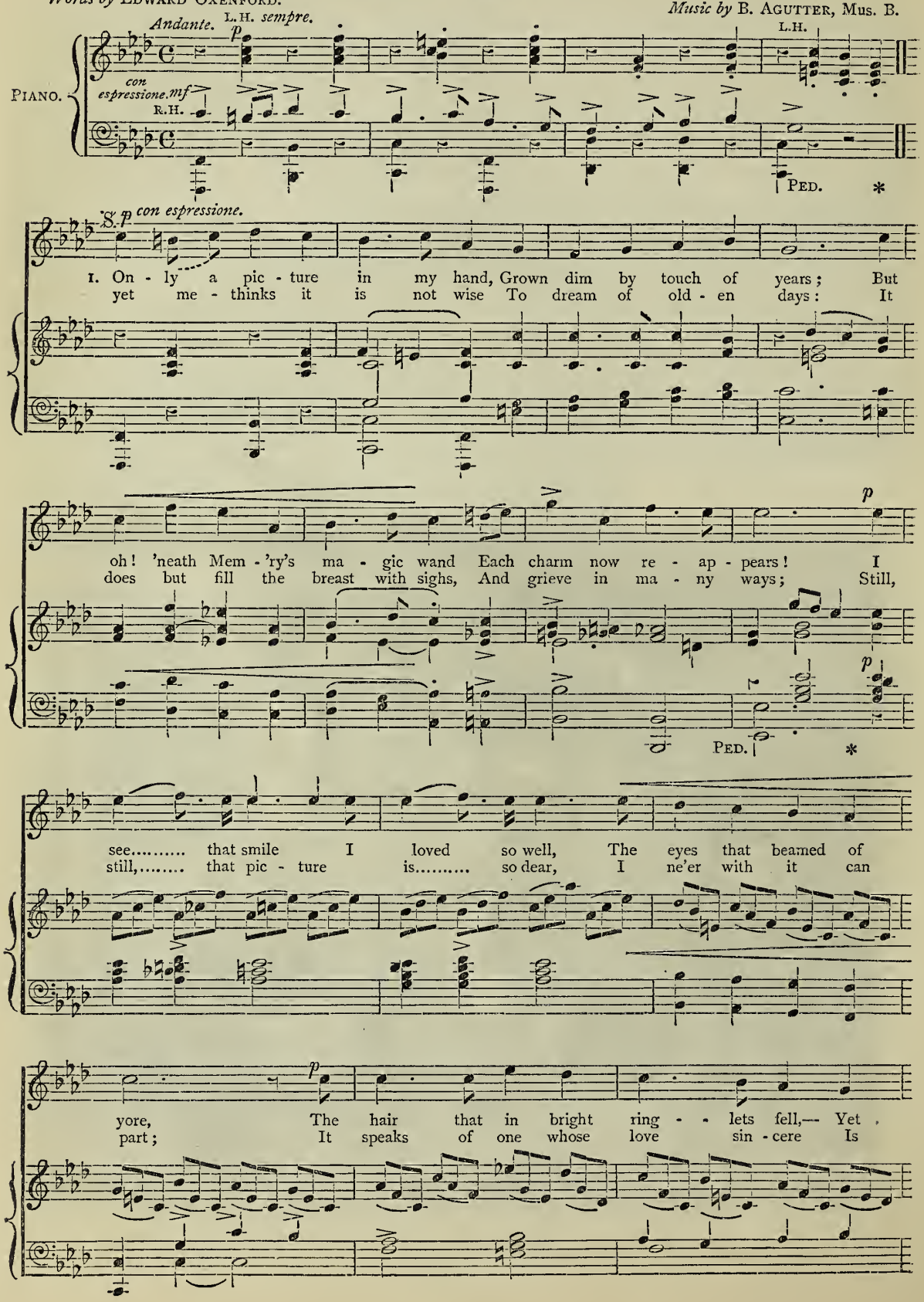
A. H. Malan.

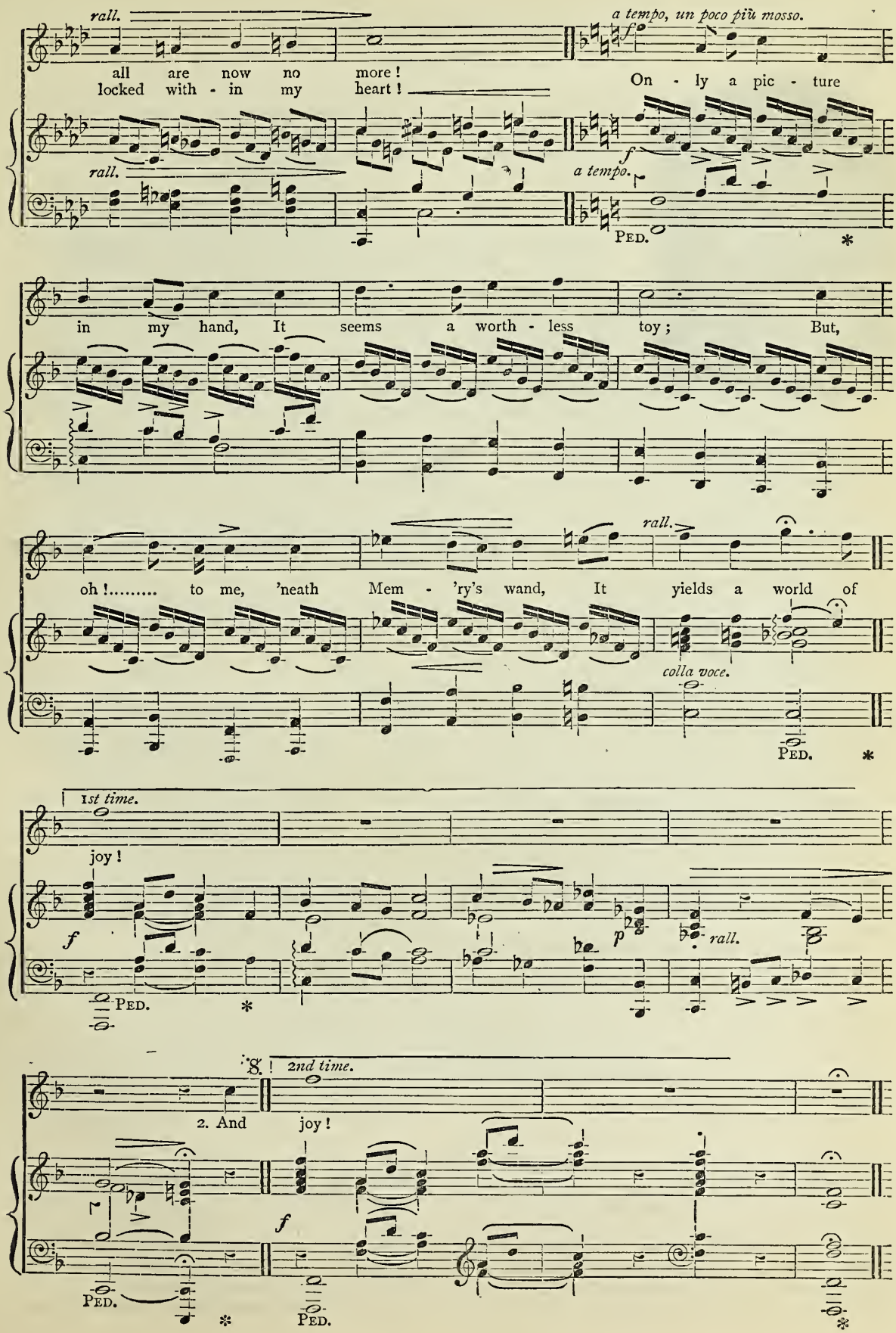


"THE SAME DESCRIPTION OF THINGS ARE TO BE SEEN AT ALMOST ALL BAZAARS" (*p.* 212).

Only a Picture.

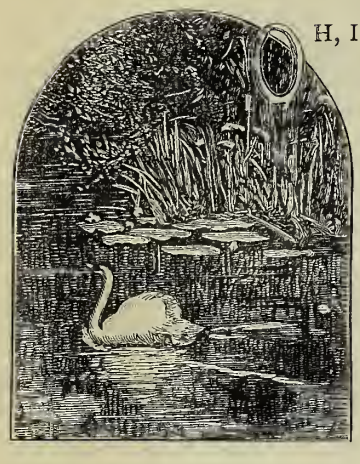
Words by EDWARD OXENFORD. *Music by* B. AGUTTER, Mus. B.




rall.
a tempo, un poco più mosso.
all are now no more!
locked with - in my heart!
On - ly a pic - ture
a tempo.
PED.
in my hand, It seems a worth - less toy; But,
rall.
oh!..... to me, 'neath Mem - 'ry's wand, It yields a world of
colla voce.
PED.
1st time.
joy!
rall.
PED.
2nd time.
2. And joy!
PED.
PED.

NELLY'S MISTAKE.

A LOVE-STORY.



H, I do so want my tea!" cried Nelly Manners, throwing herself into the depths of a large arm-chair. "Shopping is so exhausting on a hot afternoon like this."

"So are some other things," thought her sister Marian, calling to mind with a little justifiable indignation the pile of cuffs and collars and laces now airing before the kitchen fire, and how often the initials N. E. M. had started up under her iron that hot afternoon. She often wondered whether Nelly ever gave a thought to the how and when of the getting-up of the delicate nick-nacks of lace that so charmingly became her. But it was only a passing vexation, banished the next moment.

"Now, I declare, here's Jack coming up the path!" cried Nelly with comical annoyance, as she poised a cup of tea on one hand under her nose, and contentedly inhaled the grateful perfume; "and I'd venture anything he wants us to go for a row, and then what'll become of the hat I wanted to trim this evening for to-morrow? Well, *I* can't go, that's certain. What a nuisance he is!"

"Here's a lovely evening for a row!" exclaimed the voice of the new-comer, even before his bodily form appeared. "Be quick, girls, and let us get off. It will be glorious on the river."

Now Marian was as ardent a lover of the river as Jack himself, and it seemed to her, after her long afternoon's warm work, that the sweet, fresh breezes were the very thing she needed. Nelly, however, was quite decided.

"I am tired, Jack," she said promptly; "besides, I want to trim a hat. We really can't go."

"I hate muddling about by myself," said Jack disconsolately; "and I felt so sure you'd be delighted to come this evening."

"It will do you good, Marian," said her mother. "There is no reason why you should stay because Nelly does not care to go."

"I will come with you if you like, Jack," Marian said dubiously. She was sorry that Jack should lose the evening's recreation to which he had doubtless been looking forward all day.

"Thank you, Marian," he replied, grasping the idea that it was possible to go with one companion—which, until Mrs. Manners' suggestion, they had all lost sight of. It was so natural to make bright, pleasure-loving Nelly the centre of everything.

"We will get back early," Marian said to Nelly, noticing an anxious shade on her sister's face, which she quickly interpreted, "and I shall have time then to help you with your hat."

"You see, Jack, you would be as vexed as any one if I were to look a shabby fright at the pic-nic to-morrow—now, wouldn't you?" Nelly asked coaxingly, when Marian was up-stairs. "You see I am really pleasing you most by staying at home to-night."

Jack looked up repentantly. It gratified him to think that Nelly cared for his opinion, although he knew full well that she could not wear anything that would render her less bewitchingly fair in his eyes. He had known and been as a brother to these two girls ever since he had been a little fellow in petticoats, and Nelly an infant in her mother's arms. Lately he had watched, with a feeling almost of awe, how the child he had played with so many years was developing a beauty of form and feature that seemed to him to have no equal. Marian was a dear girl, always ready to do anything he wished, a perfect treasure of a sister; but Nelly, with her bright, sparkling beauty and vivacious manner, was a companion to be proud of indeed.

"Now, if that isn't exasperating!" Nelly exclaimed irately, when, about twenty minutes after Jack and Marian had started, there came an ominously visitor-like knock at the door.

It was indeed a visitor, and a stranger, so Nelly must perforce put down her work and be entertaining. "Mr. Edward Archer" was a name that seemed familiar, yet Nelly was quite sure she had no recollection of the tall, aristocratic-looking man whom Susan presently ushered in.

"You will hardly remember me," he explained to Mrs. Manners, "for I was but a lad when I stayed in Bloxham with my cousin Jack, but I have very vivid recollections of Minnie and Nelly Manners. My cousin did not expect me till to-morrow morning, so, hearing that he was here, I ventured to follow him, hoping that, for his sake at any rate, I should not be considered an intruder."

Mrs. Manners hastened to assure her visitor that she was always pleased to see any of Jack's friends, and that his cousin must be sure of a welcome from her.

"So this is Nelly—little Nelly no longer, I perceive," he remarked, with a glance of decided approval at the fair face. "When I saw her last she was a little creature of eight, in pinafores and curls, and her sister a shy school-girl whom I am afraid Jack and I delighted to tease."

Nelly laughed heartily at this description of calm, self-possessed Marian. Very soon she and Edward Archer were chatting away gaily, and by the time Jack and Marian returned, Nelly had quite forgotten her vexation in the pleasurable novelty of having this handsome, sprightly stranger to entertain.

The brunt of the millinery fell on Marian's willing

shoulders, and never had Nelly looked fairer than on the morning of the pic-nic, when her airy summer gown of some washing material was fitly completed and enhanced by her sister's deft handiwork.

conscious of a strange, undefinable feeling of distress as she noticed with what evident pleasure Nelly received the open admiration accorded her, and how delighted she was to display the homage of the hand-



"I DON'T REMEMBER HAVING EVER NOTICED IT BEFORE" (*p.* 220).

So thought Jack; so thought Edward. Nelly was in a whirl of pleasurable excitement the livelong day, for her eyes were opened to the fact that she was a centre of attraction, in a way they had never been until now.

A dangerous knowledge, especially to a bright, thoughtless girl of Nelly's tender years. Marian was

some stranger, Jack's cousin. And Marian's quiet, observant eyes noted something else. She saw Jack's troubled gaze following Nelly's every movement, watching her eager, flushed face with an expression she had never seen there before; and her quick womanly instinct told her that to-day had revealed to Jack that for the future he would never be content with a

sisterly regard from his favourite playmate and companion.

Nelly was indulging herself in a host of immensely pleasant reflections the next morning, when she received a brief note from Jack which did not at all chime in with them.

"Look here, Minnie," she cried with a scared expression, running into the kitchen, where her sister, in a large apron, was concocting a tempting salad. "What can the foolish fellow mean? Whatever shall I do? How can he be so stupid!"

"Are you sure you would like me to read it, dear?" Marian asked.

"Read it, Minnie, pray; and tell me what I can do. Oh, how foolish of him! I never should have thought it of Jack!"

"Why, Nelly?" Marian asked, quietly glancing down the letter.

"Why, he's nobody at all—at least, like that. It's too absurd. Papa might as well ask me to—to marry him! It's utterly ridiculous."

Marian sighed for Jack's sake. She saw it was a hopeless case.

"Write kindly, Nelly dear," she said gently. "I am afraid it will be a great disappointment to him. He seems so sure of your affection."

"Stupid fellow!" Nelly cried angrily. "I was fond of him—just as fond as a girl could be of her brother; and now it's all spoilt. I declare it's quite exasperating!"

"Think of him," Marian suggested quietly.

Nelly ran away to write her reply. Marian suggested several additions and excisions when she saw it, and succeeded in achieving a tolerably gentle expression of Nelly's decided refusal. That young lady, however, was of opinion that the letter was by no means crushing enough, so before she enclosed it in its cover she added a postscript:—

"This is my *unalterable decision*. I shall *never change* my mind. Whatever could have put such an idea into your head?"

Poor Jack came no more to the Manners' pleasant house. Marian wondered very much how he was feeling over his mistake, but was far too delicate to seek his confidence, so she too held aloof. A week hence they heard that he had obtained a commission in the North, and had left Bloxham for an indefinite period.

Nelly was a little indignant that he should have gone off without saying "good-bye;" but her mind was too occupied with certain other thoughts which were filling it just now for her to think very much about Jack or his concerns. Only tender-hearted Marian wondered how he was bearing the keen sorrow she knew he was feeling, and comprehended all the misery that was expressed in that sudden flight.

Edward Archer was paying a long visit to his relations, and seemed very naturally to have slipped into the familiar intercourse that Jack had so freely indulged with the two girls. His admiration of Nelly was open and evident, he praised her pretty hair, her charming taste, her unflagging cheerfulness, with the utmost freedom. With Marian he was much less frank, yet he was always kind and attentive, and anxious for her to accompany them in all their expeditions—boating, croquet, or lawn-tennis. Even when his summer holiday was ended, and he had returned to town, Saturday and Sunday frequently saw him at Bloxham. Nelly guessed very well what brought him there, though he did declare that the boating there was irresistible, and an afternoon on the river was better than any amount of tonic.

One Saturday afternoon, late in the autumn, he called and found Nelly out.

"If we wait till she returns," he said to Marian, "we shall get no boating, for the afternoons are growing very short. Will you not come at once?"

Marian hesitated.

"Nelly will not be in till tea-time; if you are to go at all you must not wait for her," Mrs. Manners remarked, "and indeed, Marian, I think you require a little air; you have been staying in, dear child, with me all the week."

Marian was quite pleased to have the recreation, only a little perplexed that Edward should be so willing to start without Nelly. She was still more perplexed when, on reaching the river, Edward quietly remarked—

"Will you mind taking a walk along this lovely bank instead of having a row this afternoon?"

"Not at all," Marian replied unsuspiciously. "Perhaps you are feeling tired."

"No, it is not that. A boat is not the most convenient place for conversation, and I want to talk to you, Marian."

"It is about Nelly," thought Marian, warned by something in his tone and manner; and somehow, gentle and unselfish as she was, poor Marian shrank with an unaccountable dread from hearing the news that she felt was coming.

She was one of those girls to whom every one came with their confidences, never taking into consideration the possibility of her own feelings being enlisted in the trouble for which they claimed her sympathy. It had been so often before, and Marian had not shirked the pain thus inflicted, so now she put aside all thought of self, and prepared to hear Edward's story, and to aid him in any way that lay in her power.

They walked on some little distance in silence. Edward's usual nonchalant ease of manner seemed to have deserted him entirely. He looked anxious and distressed, started a conversation several times on some commonplace subject, and as abruptly quitted it, and finally drew up suddenly under a little clump of trees, and stood leaning against the low wall, gazing abstractedly into the river.

"I think I can guess what you want to tell me," Marian ventured to say presently, in pity for his evident distress, yet wondering why he should be so diffident. "It is about Nelly."

"Oh, no," he exclaimed hastily. "Whatever could make you think that, Marian? Did you imagine I had fallen in love with the pretty child?"

"Yes," she replied, and then her eyes fell before his, and in a moment she saw all her mistake.

"Marian, I love *you*: you think I am rash, but it seems to me ages since I first loved you. I could not wait to know my fate any longer. Tell me that I have not ruined my cause by my haste."

Who could have believed that quiet Marian, who all this time had cheerfully resigned to Nelly the attentions that her sister so naturally claimed, had known her own mind perfectly well, and, in spite of her surprise, could give her lover her answer without a moment's hesitation.

"Mamma, look at Edward and Marian," Nelly cried sharply, peering through the deepening gloom at the two figures coming up the garden walk. "What can it mean?"

They came up to the open French window, against which Nelly and her mother were sitting. Their tale was soon told, but Nelly did not stop to hear it, she had fled from the room.

Marian found her lying all across the bed, in a perfect abandonment of agitation.

"Oh, Marian, how could you—how could you?" she sobbed out. "You have all agreed to deceive me. Who could have dreamt it of either of you!"

"My darling, I was afraid of this; you make me so unhappy," Marian cried, walking up and down the room in an agony of grief and remorse. "If only it could have come to you more gently! To think I should give you this pain! Oh, Nelly, you know I wouldn't willingly have done it for worlds."

"Why should I grudge you your happiness? I am sure you deserve it," Nelly cried with sudden generosity. "Don't mind me, Minnie dear, but, oh! why did you let me be so deceived?"

Marian did not remind Nelly that she had deceived herself by exacting a continual attention that was given innocently enough—as to a child; nor would she remind her of poor Jack's fate, and the little concern she had ever felt for his pain, but Marian could not prevent a passing thought of these things.

In spite of Marian's constant manœuvring to spare Nelly, the girl drooped, and lost her usual flow of spirits. Her mother, divining something of her malady, sent her away for the winter to a distant friend, where, removed from the observation of those who had known her from her childhood, she learned to bear the first real sorrow that had shadowed her young life.

In the following autumn, when Marian and Edward were married, Nelly had regained her bloom and energy. She could tease Edward in the most sisterly way, and had apparently recovered from the wound she had received, yet a keen observer could detect a difference in the girl's character. She was far less self-engrossed and exacting, and Marian, rejoicing over the additional attractiveness of her ever-attractive sister, longed for Jack to come home and try his fate again. For he had never been near them since, though they had heard of him from time to time, the last news being that he had gone to New York, entrusted with the charge of a branch of the business in which he was engaged.

Marian wondered if Nelly, as the years passed on, ever regretted her hasty decision. Other wooers came, but Nelly would have none of them, and indeed there were none that could compare with brave, honest Jack. She believed that he would have had a very different answer if Edward had not come in the way at that untoward moment—when Nelly had once allowed herself to realise the strangeness of exchanging Jack's brotherly regard for a dearer one. Marian perceived that the fact of Edward being a stranger, and so many years her senior, made Nelly like the importance of his fancied attentions, and that the girl's pride and self-love had been much more wounded than her heart. She even suspected sometimes that Nelly had discovered her mistake, and would never care for any one but Jack. Why did he not come? Could he have forgotten his old love? If Marian could only know about that, she would have written to tell him all her surmises, but it was too delicate a matter to interfere in. His parents had removed to another town. He had never written, and she knew nothing, so she could only lament in silence that Nelly should be denied the happiness that was her own lot.

Six years had changed Nelly into a woman, quiet and subdued in comparison with what she had been as a girl, but still boasting of no ordinary beauty. She was not so changed, however, but that the occupant of a small boat, lazily plying his oars one summer evening, recognised her as she stood waiting at the water's edge for the ferry-boat.

He lay dubiously on his oars, hesitating what to do. The old wherry had not yet put out from the other side, its owner apparently having gone on shore for some refreshment. With sudden determination he rowed briskly up to the bank, and drawing up his boat, asked whether she would allow him to take her across.

She started at the sound of the voice, glanced inquiringly at the bronzed face, and then exclaimed—

"Why, Jack!"

"Yes, Nelly; am I so altered?"

"No, scarcely at all; only I thought you were in New York."

She stepped into the boat, he grasped the oars without any further remark, and away shot the light boat into mid-stream.

Neither spoke, yet each heart was in a tumult of wonder, and doubt, and apprehension. The silence became oppressive. Nelly felt it must be broken, so she rushed into commonplace observations.

"Isn't our river lovely just here? I have never seen anything prettier."

"Nor I," Jack responded. "The American rivers are quite a different thing—immeasurably grander and more imposing, but nothing like this for peaceful beauty. They could never give one the homeful feeling that this has."

"Do you see this plant?" Nelly asked, leaning over the boat, and plucking a sprig of tall, graceful foliage that stood up out of the placid water. "It is very rare, I think; I have never seen it in any other part of the river, and even here you see it very seldom. It is so lovely when in bloom. This is not. What a pity!"

"There is some over there, I think. Shall we go

over and see? Allow me to look at it. I don't remember having ever noticed it before."

Nelly handed him the little sprig. He took it from her, and examined it carefully, as if it were a matter of vital importance. Their eyes met for a moment, and Nelly continued the conversation vigorously. Oh, what hypocrites, to be discussing thus earnestly a bit of paltry river-weed, when each heart was full of such widely different thoughts!

"It was only the sun on the leaves; I thought it was a blossom," Nelly said, earnestly examining the plant to which Jack had rowed up.

"It is very pleasant out here this evening," Jack remarked presently. "Would you like to stay out a little while?"

"Thank you; I think I must go home," Nelly replied, feeling she could not endure much more of this kind of thing.

So Jack handed her out, and held her trembling fingers for a moment in his, then he drew his boat up into the house, donned hat and coat, and prepared to accompany her, though he was angry at his own weakness in scorching himself in this way. He saw so plainly before his eyes those words impatiently dashed two or three times underneath: "This is my *unalterable decision.* I can *never change* my mind."

He was presently thinking that he had been a fool to come. The effort to appear natural and unconstrained was too much for both. It was a relief to reach the garden gate, and bid each other good night.

And yet good night could not so easily be said, for it meant good-bye; and Jack felt that this time it must be final. No more coming back to rake up the ashes of dead hopes; and instead of good night, he could only cry out, in a voice of suppressed pain—

"Nelly!"

She was not the old Nelly—she could feel for his pain, and be gentle with him—she could be sorry for what he had suffered for her sake all these years, and hate herself for her cruel thoughtlessness of long ago.

"Jack, forgive me!" she said humbly, "I made a great mistake."

The underlined words vanished in a moment.

"Nelly, my love!" he exclaimed, "when did you find that out?"

"Oh, years ago," she replied, a little wearily.

"Poor little Nelly!" he said remorsefully, without a thought of his own past pain. "Oh, those wasted years! How selfish I have been!"

"Don't reproach me like that, Jack," Nelly cried imploringly. "And I hope the years have not been wasted. I was a very worthless Nelly then. I think I am better now."

"Then or now, the dearest little Nelly in the whole world," was Jack's reply.

HERALDRY AS A POPULAR STUDY.



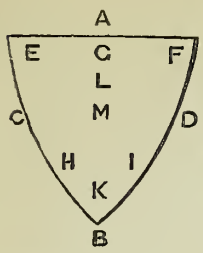
THE ARMS OF HANOVER.

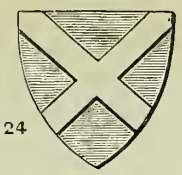
POPULAR opinion as to what constitutes a polite education certainly varies with the times, and many of the items now supposed to be its chief excellencies were entirely undreamed of a generation or two ago. On the other hand, some branches of knowledge on which our great grandparents were wont to pride themselves have to a considerable extent receded from sight, and faded into the mists of that past whence we every now and then pluck an antiquated blossom, find that it is fair, and wonder why it has been so long neglected. Thus we see the garments of our ancestors suddenly rescued from limbo, and declared by the powers that preside over the pomps and vanities to be the height of fashion, or hear of the novels that have been voted stilted and slow for the last half-century being brought out in modern editions, and eulogised as models of their kind.

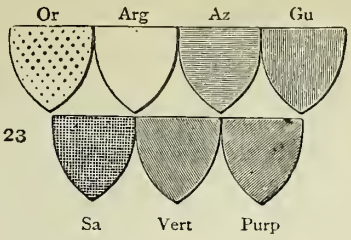
The fancy of the present day decidedly sets towards everything that bears the stamp of age. Fabulous prices are given for old china and lace; we buy old furniture for our houses, old silver for our tables, and old jewellery for our personal adornment; while we may be said to have created new branches of business which in plain English are neither more nor less than the manufacture of spurious antiques. Moreover, with the revival of a taste for the objects of use and *vertu* among which our not very remote progenitors lived, moved, and had their being, has arisen a corresponding feeling of interest in their habits of life, modes of thought, and favourite pursuits.

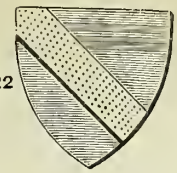
One of the most characteristic among the latter was that of heraldry, a science whose phraseology now seems to ring almost like the accents of an unknown tongue in the ears of the majority even of those whose note-paper and plate are resplendent with the glories of a crest and motto. Men are so busy in building up their fortunes that, like Frank Osbaldistone, in *Rob Roy*, "the mysteries couched under the grim hieroglyphics of heraldry are to them as unintelligible as those of the pyramids of Egypt," and women, instead of echoing the indignant surprise of bright Diana Vernon when she became aware of his ignorance, would very probably scout her for not being acquainted with the rules and regulations of lawn tennis.

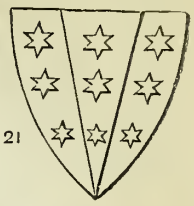
Nevertheless a love for the "gentle science" is re-appearing, and Sir Walter Scott did something towards leading the way to that popular sympathy with most forms of expression of early art which is so notable a feature of the time in which we live. We cannot aspire within the limits of a few short pages





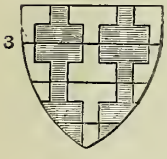






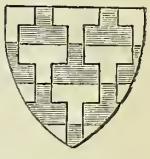






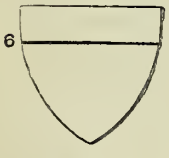


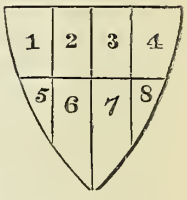


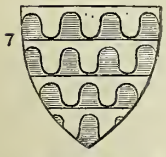














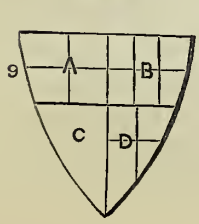


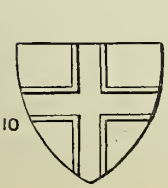


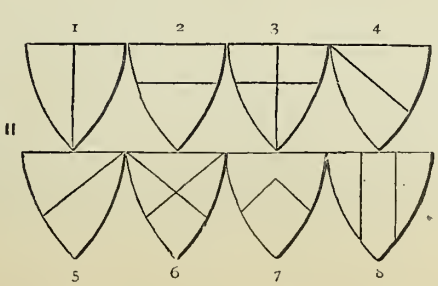
to unravel the intricacies of a science on whose canons and their interpretation so many folios have been written, nor to enable our readers to comprehend the exact style and title of every one whose armorial bearings may come under their notice; but it is possible to indicate some of the main points of the grammar of heraldry, and when these are once made clear, those who have the leisure and inclination will find it very easy to pursue the subject further for themselves. We can also promise that none who honour this slight sketch with an intelligent perusal need ever fall into the error of that novice who, a few years ago, made himself both absurd and conspicuous by assuming that a *bar sinister* and a *bend azure* were symbols bearing one and the same meaning.

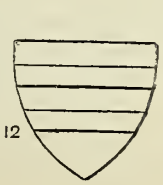
In the olden days of England, and other countries in which the feudal system prevailed, the love and knowledge of heraldry was common among all classes, and was based on appreciation of its value. It also exercised a powerful influence on the manners and habits of those who realised it to be a noble thing to keep a fair name unsullied, and who were aware that dishonour could be written in figures known and read of all men, wherever they might be seen. When the arts of reading and writing were clerkly rather than knightly accomplishments, family traditions were fondly cherished and handed down orally from father to son, the devices on the ancestral shield being to them the outward and visible signs of the spirit of chivalry, as well as the index to unwritten records of doughty deeds. Thus it grew up spontaneously out of the circumstances and requirements of the times, and though at first simply useful for distinguishing particular individuals, especially in fight and tourney, it rapidly became popular, and rose to high dignity and honour. We may define it as a symbolical and pictorial language in exclusive connection with persons, families, or offices, every heraldic composition being a true legal possession, untransferable save by inheritance or other lawful succession, and capable of expansion through association with successive generations.

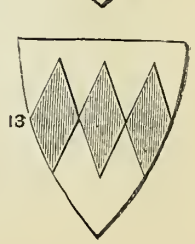
The terms in which English heraldry is couched are the old Norman-French, and have their own special significance; superfluous words and particles are entirely omitted, and descriptive epithets follow the nouns to which they refer. The shields on which coats-of-arms are ordinarily displayed are, of course, derived from those with which the knights in armour of the Middle Ages endeavoured to protect their bodies.











Consequently we must look at a shield as though it were on the breast of the wearer, and remember that the side of it facing our left hand is on the knight's right or *dexter* side, and the one confronting our right hand is on his *sinister* or left side. The Parts and Points of an heraldic Shield, which is also called an Escutcheon, are distinguished thus :—A, the Chief; B, the Base; C, the Dexter Side; D, the Sinister Side; E, the Dexter Chief; F, the Sinister Chief; G, the Middle Chief; H, the Dexter Base; I, the Sinister Base; K, the Middle Base; L, the Honour Point; M, the Fesse Point (1).

The Primary Divisions of a shield are as follows : 1, per Pale; 2, per Fesse; 3, per Cross; 4, per Bend; 5, per Bend Sinister; 6, per Saltire; 7, per Chevron; 8, per Tierce (11).

It is hardly necessary to say that the term *per* signifies "by" or "by means of;" it is often employed alone, and sometimes with the word "parted" or "party."

The further divisions of shields are made by lines drawn *per pale* and *per fesse*, cutting each other as in the figures 16 and 9. These are called Quarterings, and the first example (16) is *quarterly of eight*, while the second (9) is a specimen of *quarterly quartering*. The four Primary Quarterings are called *Grand Quarters*, and the quarter B of this illustration is termed the *second grand quarter*, *quarterly of six*. The whole surface of every shield is termed the *Field*, and the same designation is applied to *every plain surface*. We say that a shield is "*borne*" by the person to whom it belongs, and that it "bears" whatever figures and devices may be displayed upon it, whence the said figures and devices are entitled "Bearings" or "Armorial Bearings." They are likewise styled "Charges," and are said to be *charged* upon a shield or banner, or upon one another. In blazoning, the field of a shield is always described first, then the charges that rest upon that field, and afterwards descriptions are given of any secondary bearings that are charged on others of greater importance.

Elaine, the Lily Maid of Astolat, must have been an adept in heraldic lore, or she could not have braided on its silken case "all the devices blazoned on the shield" of Lancelot "in their own tinct," since the *five colours* are represented by dots and lines which go in certain specified directions. Properly speaking, these as well as the *two metals* and *eight furs* are comprised under the name of *tinctures*, and are indicated as below.

The names of these metals and colours are given according to their proper abbreviations (23), and stand in full with their English equivalents thus :—*Or*, Gold; *Argent*, Silver; *Azure*, Blue; *Gules*, Red; *Sable*, Black; *Vert*, Green; *Purpure*, Purple.

Next come the eight furs, viz. :—Ermine, black spots on white; Ermines, white spots on black; Erminois, black spots on gold; Pean, gold spots on black; Vair; Counter-Vair; Potent; Counter-Potent. The four latter furs are always in *argent* and *azure*, unless some other colour and metal be specified in the blazoning.

Animals, and indeed all objects that in heraldry are represented in their natural aspect and colouring, are blazoned *proper*, and the correct abbreviation of this word is *ppr.* Heraldic devices and compositions when merely sketched in outline with pen or pencil are said to be *tricked* or *in trick*. When the field of any charge is divided into a single row of small squares alternately of a metal and a colour, we call it *Componée;* if there be two such rows, *Counter-Compony;* and if there are three or more of them we say it is *Chequée*. A strict law of English, though not of foreign heraldry, is that *metal be not on metal, nor colour on colour*—that is to say, that a charge of a metal must run on a field of a colour, and *vice versâ*. Our solitary and intentional national violation of this rule is the *silver* armorial shield of the Crusader Kings of Jerusalem, on which *five golden crosses* are charged, the motive being to make this shield perfectly unlike that of any other potentate. *Counter-changing* is dividing the field of a shield so that it is partly in metal and partly in colour, and making any portion of the charges upon it metal where they are on the colour, and colour where they are upon the metal, even if this division come in the middle of them.

We must now pass on to the simple charges called Ordinaries, which are nine in number :—6, the *Chief;* 14, the *Fesse;* 12, the *Bar;* 19, the *Pale;* 10, the *Cross;* 22, the *Bend;* 24, the *Saltire;* 15, the *Chevron;* 21, the *Pile*. These are supposed to have had their origin in the means adopted to strengthen shields for use in battle. They are sometimes borne alone, but are more frequently associated with other bearings, or have devices charged upon themselves.

Next in rank are the Subordinaries, a description of which is beyond the limits of our space. A few words must be bestowed on the Roundles, or Roundlets, which are in constant use, and are divided into two groups, the first being composed of the two Roundles of the metals. They are flat discs, one being the Bezant, or golden Roundle, which probably derived its name from the Byzantine coins that the Crusaders, when in Eastern lands, may have fastened on their shields as heraldic distinctions. The silver Roundle, or *Plate*, is from the Spanish *plata* (silver). The second group consists of the five Roundles of the colours, which are globular. The *Torteau* is gules; the *Hurt*, azure; the *Pellet*, or *Ogress*, sable; the *Pomme*, vert; and the *Golpe*, purpure.

We now come to such charges as are representations of natural objects, beginning with man himself, who, however, is rare in heraldry, except in the character of a *Supporter*. Parts of the human frame occasionally appear, but oftener as *crests* than as *charges*. Moors' or Saracens' heads are sometimes seen, with arms, hands, and legs; and a human heart is well known as distinguishing the coat-of-arms of the house of Douglas, in commemoration of the duty entrusted by Robert the Bruce to Sir James Douglas to carry his monarch's heart to the Holy Land, and there bury it. The Lion is the only animal found whole in early heraldry,

and Boars' heads are the only portions of any other. Somewhat later we come upon the Bear, borne by Fitz-Urse; the Calf, by Calveley and De Vele; the Ram, by Ramsay; the Lamb, by Lambton; the Otter, under its French cognomen of *Loutre*, by Luttrell; the Hedgehog, similarly translated *Herrisson*, by De Hériz, afterwards corrupted into Harris, and other animals whose name or nature corresponded to the name or title of the bearer. This allusive character is distinguished in English heraldry as *canting*, but is far more prettily expressed by French heralds as *armes parlantes*.

Sometimes the meaning is blunted by the lapse of time, as in the case of the shield of Montacute, or Montagu (13), which bears *three fusils conjoined*, or in non-heraldic parlance, three elongated diamonds or lozenges presenting three sharp points at top and bottom. Through these we may trace the name to its still earlier form of Montaigu, and picture to ourselves the sharply-peaked mountain-crests whence the appellation probably sprang.

The lion, being the King of Beasts, must have a special notice devoted to his Majesty, and it is observable that the Sovereigns of England have borne lions on their Royal Shield as long as they have possessed any true armorial insignia. He was also the ensign of several other kings and nobles, and was in high favour with all the most powerful barons of our own realm. Being so popular a gentleman, it became necessary to depict him in various attitudes and colours, so his tawny coat was changed to one of *or*, *gules*, or *azure*, and he was most often represented erect, with only one hind paw on the ground, looking towards his prey and preparing to spring upon it, keeping his tail all the while curved over his back, with the tip curling inwards. In this characteristic posture he was called *rampant*, and, indeed, only in this attitude did the early heralds regard him as being a lion at all, so that when represented as walking and looking round him, after the manner of the three on the Royal Shield of England, they styled him a leopard. Lions in the *rampant* position, but with full face turned to the spectator, are said to be *rampant guardant*; standing on three legs, with right paw raised, they are *passant*; standing on all-fours, they are *statant*; lying at rest, with head erect and eyes well awake, *sejant*; in a similar position, but asleep, with muzzle snugly ensconced between front paws, they are *couchant*; standing up on two hind legs, *salient*; and when in the act of running with his tail between his legs, and his head turned backwards, Sir Lion receives the epithet of *coward*.

Among birds, the eagle is considered to be of royal rank. When he has two heads (4), severally looking to the *dexter* and *sinister*, he typifies a rule that claims to extend over both the Eastern and Western Empires. Single-headed eagles have a less comprehensive meaning. Any birds of prey with expanded wings are said to be *displayed*, other birds are *disclosed*. Expanded wings are *overt*; if only elevated, but not outspread, they are *erect*; if drooping, they are *inverted*, or *in lure*. If a bird is about to take wing, it is *rising*; if in flight, *volant*; when flying aloft, *soaring*; when at rest, *closed* or *trussed*. A peacock, or any other feathered fowl, with its tail expanded is *in its pride*; and a pelican feeding its young is *in its piety*.

"Marshalling," to quote the ancient herald, Gwillym, whose tomes formed the sole winter evening literature of Sir Hildebrand Osbaldistone, "is a conjoining of divers coats in one shield," and there are several modes of doing it. The one most generally interesting applies to the principle of denoting alliance by marriage, or marshalling the arms of husband and wife. This is done, if the lady be not an heiress, by impaling, *i.e.*, parting the shield *per pale*, and representing the arms of the husband on the *dexter*, and those of the wife on the *sinister* side; while if she be an heiress, her arms are borne on an escutcheon of pretence, that is, a small shield placed in the centre of her husband's larger one. The eldest son of this couple quarters the arms of both parents, his father's in the *dexter* chief and *sinister* base, and his mother's in the *sinister* chief and *dexter* base. Younger sons cover all the quarterings of their shield with their own distinctive *Mark of Cadency*. An unmarried lady bears her paternal arms on a *lozenge*, or square figure set diagonally. The Sovereign is the only lady who uses an escutcheon.

A widow bears on a *lozenge* the arms borne by her husband and herself. Should she marry again, she ceases to bear the arms of her first husband, unless he were a peer, in which case she retains the lozenge bearing his arms and her own, grouping it in a subordinate manner with a separate shield on which her second spouse marshals her arms with his own.

Marking Cadency is distinguishing the armorial insignia of kinsmen, members of the same family or of its several branches, and must be secondary to the original coat-of-arms denoting the senior branch. This is termed *differencing*, and is sometimes done by placing a *bordure* round the shield, adding separate small charges sown over its field, or in one quarter, or on a portion of a larger charge.

Crests had their origin as distinguishing badges worn upon a helmet. They are sometimes identical with the principal charge on a shield, but are generally entirely distinct. They are not used by ladies. It is obvious that any one who quarters two or more coats-of-arms, has a choice of the crests belonging to them, but the strict heraldic rule in England is that two or more than two crests can only be borne by one individual when he has obtained the royal licence to use the surname and arms of another family in addition to those of his own, or by a special grant from the Crown.

Mottoes probably sprang originally from the war-cries of early times. They are frequently allusive, epigrammatic, or bespeak some favourite sentiment of him by whom the words were first adopted. Such are the "Fare, fac" of Fairfax, the "Set on" of Seton, and the "Perse valens" of Perceval.

Our readers must kindly observe that this very brief summary applies entirely to English heraldry; they

manage many things differently on the other side of the Tweed, as well as in Continental countries. The similarities, however, are far more than the differences, and these are merely varying dialects of the same tongue, and do not present half so many difficulties to the initiated as does the speech of a Northumbrian to a man of Kent, or that of a West-countryman to a native of Cockaigne.

E. CLARKE.

THE TROUBLE IT BROUGHT.

By C. DESPARD, Author of "The Artist and the Man," "When the Tide was High," &c.

CHAPTER THE NINTH.



"AND now, Eugene," I said, when we were fairly out of ear-shot of the drawing-room, "will you take pity on my bewilderment, and explain things to me a little? I followed your lead at dinner, blindly, as you may have noticed.'

"You did not follow more blindly than I led," he answered; and I plucked up heart, observing that there was no trace of uneasiness in his manner. "The form the conversation took was displeasing to Nina for some reason or other. I was opposite to her, and I saw her turn pale. I tried to change it. Of course I appealed to you for help. You and I understand one another, Mary."

I answered, pressing his arm, that I hoped we always might.

"But," I said, "this puzzles me still more. What is the meaning of everything? The village is in arms about the old ghost legend. Miss Ashley suspects Nina and me of tricking people. I *certainly* heard a very singular noise in the churchyard the other night; Nina heard it too, and ever since she has been as mysterious as she can be."

Eugene smiled. "What a string of calamities!"

"Indeed," I said, "it is no laughing matter. You know how people talk. If Nina continues to haunt that old house in this perverse fashion, I am afraid to think of what the consequences will be. Have you noticed that she has taken to wearing very light colours lately?"

"Yes, but without surprise. White suits her. How exquisite she looked to-night!"

"Yes, she looked well."

"Did you notice the laughing light in her eyes when Miss Ashley was struggling to get out the first words of her story?"

"I am afraid Miss Ashley noticed it, too. If so, that will account for her asperity to-night whenever Nina's name was mentioned."

Eugene's pace quickened; I could not see his face distinctly; but a convulsive moment of his arm warned me that he was angry, and I did not speak. He recovered himself presently, and began to laugh. "Do you know the wish that crossed my mind just now, Mary?" he said. "It was an absurd one; but I have had it before; I expect I shall have it again. If only some of our friends were men instead of women, it would be so particularly comfortable."

"And if they were, what would you do?"

"Tie up their tongues effectually. However, it is no use wishing; women will talk to the end of the chapter."

"Are men dumb?"

"They have a little conscience."

"Some of them."

This point I have often discussed with my brothers. As I am in a minority in the house, I have long since been forced to sit down calmly under the imputation that women are the only gossip-mongers in the world. I did not, therefore, upon this occasion think it worth my while to add anything to my last insinuation. I now observed that we had walked all round the garden without coming across Nina, and hoped she had not gone beyond the gate in her evening dress. "If any of the villagers met her," I said, "she would certainly be taken for the ghost."

"Which would serve as a safeguard," answered Eugene, laughing; "not the most adventurous person in the village would presume to go near her."

He then advised me to return to our guests, and said he would try to find her.

I must confess that, after Miss Ashley's parting words, to return to the room without Nina humiliated me. I felt more vexed with my cousin than I had ever been before. Few questions, however, were asked, and those few I parried skilfully. Nina was not quite herself that evening—I could say this with a pure conscience; had she been herself she would not have acted so strangely. It annoyed me to see Miss Ashley look round—for Eugene, I am sure—and, when she failed to discover him, cast at me an expressive glance, which I at once interpreted as "My prophecies are fulfilled, but never say I did not warn you."

Fortunately for us all, M. Dubois was in one of his happiest veins. Solitary as he is, poor and unknown, the Gallic vivacity which, under better circumstances,

would have made him a brilliant man of society, crops up now and then. And this is specially the case in our house, where the old man knows he is loved and appreciated.

He is intensely sympathetic. I think he felt I was in difficulties, and he came to the front gallantly. I could have kissed the dear old man that night, as he rattled on in the broken English which, from his lips, comes pathetically, telling anecdotes of the old days in France, rallying Miss Ashley on her silence, flattering Mrs. Green, arousing the colonel's patriotism by slighting allusions to some of our most constantly

I was glad. "Thank you," I said to him warmly.

"I have done well, then?" the old man asked, and his face looked benign and fatherly.

"You have helped me more than I can say," I replied, with eager enthusiasm.

"It is good to help Mademoiselle Marie," he answered, "for she does not often want our help."

"Oh, M. Dubois! what do you mean?"

"Sit down," he said peremptorily, "there by the window. And now listen to me. You are my child. I cannot bear that anything should trouble you. You are troubled. Do not say no to me. I like not to be



"I LOOKED ROUND . . . HORACE WAS HANDING NINA AN ICE" (*p.* 230).

vaunted deeds of arms, calling out James's pugnacity, and bringing to the front, by some subtly calculated remark, Henry's heavy artillery.

Thanks to him, the hour after dinner, which had threatened such portentous length and gravity, passed away rapidly.

"Really," Miss Ashley said, rising, when the clock was on the stroke of eleven, "I had no idea it was so late."

James was ready to escort her home. Mrs. Green's carriage had been at the door for some time. The colonel, deep in an elaborate account of the relative positions of French and English at the Battle of Alma, was reminded by his wife of the hour. With a "Dear! dear! how time does fly, to be sure!" he rose to his feet, and bade me good night. My father and Henry went out with him to the hall, and my dear old master and I were left alone.

contradicted. You are troubled. Your forehead is not so serene as once, Mademoiselle Marie. Be silent. I do not ask what the trouble is. If you liked to come to me to say, 'M. Dubois, my old master, help me,' it would be another thing. You do not; then I feel my way. I help you as I can. Does Mademoiselle Marie understand?"

I did understand, and the tears came into my eyes as I pressed his old withered hand.

He drew it away, and went to the piano, and, mingling with the sounds of carriage-wheels and parting words, came to my ears one of Beethoven's lovely Andantes, and, on its solemn beauty and deep soul-stirring pathos, as on angels' wings, that which was best in me seemed to rise triumphantly, till it became all of me, and the littleness, the petty thoughts, the irritation, the lingering jealousy and dread of busy tongues tamper-

ing with and tarnishing what was fairest to me and sweetest, fell away. I knew the world was large, I felt happy once more in freedom from harassing care, and the dull suspicions which, more surely than anything else, when they take possession of the human heart, poison the sources of its joy, vanished.

It seemed strange, it was really perfectly natural, that at this very moment I should see outside the window, and gazing at me silently, as if she longed to read into my soul, my cousin Nina in her white dress. The music had brought my warmest feelings into play; besides, as I saw her there, the light from within shining on her face, with a tender gravity in her dark eyes, and an expression about the red-lipped, child-like mouth, which made her seem to be dumbly appealing for forgiveness—as I saw her standing there, so gentle, womanly, and pure, it was perfectly impossible to mistrust her.

I am ever thankful that I acted on my impulse that night.

"Come in, darling," I said. "Why are you standing outside?"

And I held out my hands with earnest entreaty.

She took them, looked at me for a few moments in silence, then, stooping, imprinted a long and lingering kiss upon my face.

Not a word, however, did she speak either of explanation or apology. While the music was still sounding, she glided across the room like a spirit, and, listening, I heard the sound of her light step along the passage.

Later, when my old master had gone, when I had bade my father and brothers good night and all the house was still, I crept into Nina's room. She was in bed, and fast asleep; I did not wish to disturb her, and was creeping out again silently, when I caught sight by her bedside of the basket which she carries constantly now. It seemed to be full, but a light muslin covering concealed from me its contents. Looking at it some of my late curious suspicions returned to my mind; trembling I stood still in the middle of the room. If I found out what the basket contained, I might be helped to the discovery of Nina's secret. At the thought, the colour mounted to my face. I was ashamed, I felt like one detected in a wrong and shameful action. And yet was it not right I should know? How could I be accountable for the proper conduct of my father's house, if I was ignorant of what came into and went out of it?

Nina did not stir. I began to wish she would. If her eyes were to open I could, I thought, sit down by her side, and ask her what I desired to know. But she had looked pale and tired that day, and this sleep was sweet; it was not in my heart to disturb her.

I had again approached the bed. Almost mechanically I took up the basket in my hand. It was full certainly, and much heavier than I could have imagined from its size. What could it contain? My hand was actually on the muslin covering thrown over it, when sudden repentance seized me. Whence it arose I cannot say; but it came in the form of a self-hatred, such as I had never experienced before. The sleeping face, upon which I scarcely dared to look, seemed full of the majesty of helplessness. Eugene's words returned to my mind. Love without confidence, what was it but a name, a mocking illusion? I did love my cousin; her sweet nature, her generosity, her enthusiasm for all things good and noble, her sisterly dependence upon me, her swift appreciation of Eugene and her filial love for my father, had won my heart. If I loved, then, why could I not trust—trust as Eugene did, without a wavering thought? What demon of mistrust had brought me to Nina's bed that evening? It was not mistrust, I answered myself, it was affection. But the affection displayed itself strangely. If her eyes were to open, if she were to see me trying to pry into her secrets, what would she say, what would she feel? And at this idea I put the basket where I had found it, turned and left the room swiftly.

It is easy to deal with our actions: our thoughts are far more volatile and independent. I could not sleep that night for thinking of Nina's basket and its unseen contents; and very early in the morning, having heard the door of her room open, I got up and went to my window, which looks out to the front.

After waiting for a few moments, I saw my cousin walking rapidly along the avenue. She was dressed in white: her step was light and springy as if the freshness of the morning had revived her; the basket, still with the muslin covering thrown over it, hung on her arm. While I watched she stopped, gathered a small bouquet of common flowers, and laid them upon the white muslin; then, putting down the basket, she sprang into a large lilac-bush, and broke off some branches of blossom. As she jumped down her face was turned towards the house. She was still pale, but I could not help noticing the peculiar joyousness of her expression. I drew back lest she should see me, but she did not look up. She took her basket in one hand and the lilac-blossoms in the other, and went on her way till the bend in the avenue hid her from my view.

I did not see her again until we all met at eight o'clock breakfast, and then—for she had returned some time from her early excursion—she came down quietly from her room, dressed in her ordinary morning dress as if she had only just risen. Our breakfast-table is never very lively. Henry and my father read the daily papers. James is never conversational. Eugene is not often present; he likes a cup of tea to be sent to his study. Nina and I have frequently our letters to read. But this morning my father put down his paper after he had glanced over the headings of the different columns, and glancing across the table at Nina, said with his usual gentleness—

"They tell me you are particularly fond of visiting the Old House in the Churchyard."

"Who tells you, Uncle Richard?" She looked down upon her plate, and appeared to be deeply absorbed in the task of cutting her toast into minute pieces. I think her manner perplexed my father.

"Who tells me? Why, everybody. I am sorry to say some of the old folly has got abroad. It discourages me to see how ready people are to revive any silly superstition."

James here interposed with a remark to the effect that the superstition could not have been revived without some cause. "There is no smoke without fire," he added, and looked searchingly at Nina, who raised her dear innocent eyes and returned his gaze with perfect frankness.

"James is right," my father said, "that there is some mischievous person at the root of the matter, I expect. I have set people to watch"—my eyes were on Nina's face; she turned perceptibly paler—"and, of course, the ghost will discover itself in time. But meantime, dear child, for this very reason, will you oblige me by not going to the Old House?"

He waited for a moment, expecting, no doubt, her ready assent. She did not speak, and again James put in his word.

"Don't you understand, Nina? We can't have the family talked about. You must promise not to go there any more."

A marble image could not have been more impassive than the face Nina turned to him.

"James," said my father with rebuke, "you are too dictatorial," and he turned again to our cousin. "I ask no promise from you, dear child," he went on softly, "I only express a wish. You know I would not curtail your liberty from any personal whim."

She murmured, "I know how good you are."

"Then no more need be said," and, with an expression of relief in his face, my father returned to his paper.

"Father considers the matter settled," said James to me, later. "It is not, you mark my words. I am beginning to understand Nina a little; I didn't at first."

"Oh! indeed," I answered satirically, "and might I ask what you have discovered?"

"She is stubborn. Now I happen to be stubborn too. If it came to a tussle between her and me——"

"You would probably find out that, for once in your life, you had been enormously mistaken." I had not the slightest idea why I spoke as I did. In constituting myself Nina's champion, I was probably actuated by nothing much higher than the family stubbornness. So far, however, I felt with James as to be much surprised by the fact that, during a whole week, Nina returned to her former habits. I suspected her of being up and about at strange hours; but I could not prove the fact even had I wished to do so, and no one else seemed to have formed any similar conjecture. In point of fact, for the space of a few days, the subject of the haunted house was dropped amongst us. I saw James watch Nina now and then with an expression of suspicion in his face, and my father was, if possible, even gentler in his manner to her than before. There was nothing else to remind us of the brief controversy that had reigned in the family. Things returned to their ordinary course. Nina and I walked and read and studied together, as in the days which followed her arrival. Eugene, who was more deeply absorbed in his studies than ever, began to talk of a visit to London for the purpose of bringing out the work of Nina's father, and a volume of poems of his own, which, he told us, had already been sent to press. Fully occupied by those absorbing subjects of interest, I began to forget the mystery of the Old House in the Churchyard, or, if ever it returned to my memory, to explain it satisfactorily to myself.

Girls brought up as Nina had been, I reflected, would certainly have something strange about them. That the peculiarity should show itself at times in the form of whimsical contradictoriness was to be expected. But it was also to be expected—and this latter expectation was already fulfilling itself—that a girl like my cousin—noble, high-minded, and affectionate—would, when she found that her whims were paining those she loved, give them up freely and frankly. I assured myself, in fact, that all was right; my serenity of mind returned.

"Mademoiselle Marie is herself again," M. Dubois said to me cheerfully on one of these days; and when I assured him that his own lovely music on the night of our dinner ought largely to be credited with the restoration, he smiled pleasantly, and said that in such case he would leave me with the less uneasiness. On my asking for an explanation, he informed me that he was going with my brother Eugene to London. "The new music has taken hold of me," he said, "and I cannot rest until I hear it worthily performed. Besides, poor as you see me, I have some friends and a little influence—I can help him."

I could not thank my dear old friend, and indeed he did not seem to wish that I should, but I was heartily glad that at so trying a time Eugene should have a friend near him. One circumstance only disturbed me in those days. It had been my custom to spend half an hour in Nina's room after we left the drawing-room for the night. There was always something to be spoken about in that private and confidential manner which so cosy a nook as her pretty little room in the evening silence favours. But twice since the night of our dinner I had, on attempting to enter Nina's room, found her door locked, and received no answer to my low summons. Could it be that she did not trust me as she had done formerly? For all that I trusted her, this thought made me sad.

CHAPTER THE TENTH.

THE next events that stand out clearly marked in the book of my remembrance are the cricket-match and Mrs. Green's dinner-party.

Eugene had, on the previous day, started for London with M. Dubois; Henry was far too much occupied to have time or, indeed, inclination for such gaieties. Nina, who had appeared unwilling to go at first, had been persuaded by my father to accept the invitation, and James agreed condescendingly to be our escort. Early in the afternoon we started in the pony-phaeton for the cricket-ground.

It was a lovely day in the month of August. The sky was of that deep blue which seems to deepen to an awful remoteness as we gaze; a light breeze tempered the heat, and rain which had lately fallen made the roads pleasant and the hedge-rows moist and green.

I was driving, for no one understood our frolicsome pony so well as I, and Nina sat beside me. She

had consented, somewhat to my surprise, to throw off her mourning for that day. She and I were dressed alike, in pale green and white, the colours of our club; and it seemed to me that, with the emblems of her sorrow, Nina had thrown off the sorrow itself. I had not up to this moment seen her look so perfectly happy. Her eyes glowed: there was a soft rose-bloom in her cheeks: she talked rapidly as we sped along: everything gave her occasion for glad remark; the low twittering of the birds in the hedges, the shy wild flowers, the tall feathery grasses, the broad-leaved foliage through which, in patches, the deep, deep sky was seen, the faces of the labouring men we met, and the glimpses of spread tables through open cottage-doors—there was not an object, scarcely a sound or sensation, which did not give her food for enjoyment, which did not suggest to her mind a train of happy thoughts.

I was amused to observe that she succeeded in interesting even James. Leaning over the back of our seat he listened to her gay babbling, and put in a word now and then as occasion served. James does not like to be second even in talk. I believe he imagined he was drawing Nina out. My amusement arose from the fact that I knew the very reverse to be the case.

We stopped at one of the open doors. It was that of a small cottage which stood by itself on the border of the common, at some distance from our village. The mistress came out—a shy, shrinking, pale-faced woman—and I begged James to hand her a little basket which we had brought with us.

"Only some jelly and two or three new-laid eggs for your boy, Mrs. Pike," I said. "How is he to-day?"

She stopped for two or three seconds before speaking, then answered in a low voice and slowly, "I can't see as he gets any better, miss. The doctor, he's fairly took aback; he don't know what to make of it, and if he don't know it isn't likely as I should."

Her manner struck me as singular. She and I were generally good friends; hitherto, in any of her troubles, she had taken my gifts and inquiries kindly; but on this occasion she seemed sullen, even resentful. It would not have required much fancifulness on my part to imagine that, by some strange method of reasoning, she had come to the conclusion that I was responsible for her misfortune. I said I hoped the boy would be better soon, and asked how his illness showed itself.

"It's a wasting away," she answered, "he gets thinner and thinner. I'm frightened at times to take off his clothes: some day there won't be anything left of him." She pressed her apron to her eyes, and her pale face worked painfully.

"Poor little darling!" said Nina, sympathetic tears making her dark eyes shine. "Let us go in and see him, Mary. I have had so much to do with sickness (she turned now to Mrs. Pike) "that I am almost as good as a doctor. I might give you a hint that might be useful."

She prepared to step down. James began to murmur at the delay. I feared we could do no good; but the pale mother rapidly settled the question. She annoyed and perplexed me by rushing to her door, and standing before it like a fury. "Go away," she cried out, "go away, I tell you! he's not to be seen, not by any one. It's my husband's orders."

Here a little white face appeared at the window, and a small wailing voice was heard crying out, "Mother!" and, looking terribly frightened, Mrs. Pike ran inside. As we drove away we could her shrill voice crying out, "Didn't I tell you not to come to the window, you bad, wicked boy?"

"She must surely think one of us has the evil eye," said James composedly.

"These uneducated people," I said, touching up the pony with vigour, "are utterly stupid. They are always raking up some old superstition."

"They may not be so stupid as you fancy," said Nina very calmly. "If they see and hear what is strange, must not they interpret it according to their lights?"

"But they ought to know by this time——"

"Who knows anything?" Nina interrupted me with a sigh that made me cold. I looked at her. The glory and gladness had gone from her face; her eyes were sombre, and her cheeks were pale. Though she answered my look by a smile, I saw at once that it was a lip-smile, one with which the heart had nothing to do.

Pleasant and animated as was the scene upon which we presently looked, it was evident to me, who knew her so well, that Nina did not recover her former spirit of childlike gladness. She was courteous—as she always is—ready of answer, and pleasant in her manner. She responded with her sweet, quaint, foreign grace, to the various introductions; for all our little world was present in the ground, and the greater part of it desired to know, personally, the interesting young lady who had become a member of our household. She was generally the centre of a little group of eager talkers, and she took her part well. One and another of my old friends came up to me and declared with congratulations that Miss Nina was charming—charming—quite an acquisition in our quiet part of the world; and now she had laid aside her mourning, she would go out, of course, and how nice that would be for me!

"You are different styles," Mrs. Green said smilingly, "so you will not be likely to clash." Nina's hair and eyes are dark: mine are fair.

"Minna and Brenda over again," said another elderly lady, "most romantic, really! I declare I shall be tempted to write a story about you."

"Will you give us the same lover, and make us fight a duel about him?" I asked.

And my two old friends protested in a breath that I was shockingly satirical. "The young people of the present day," Mrs. Green said—this was her usual conclusion—"have no romance about them. When I was young we spoke about lovers with bated breath."

"Lovers? who is talking about lovers?" said Miss Ashley, joining our group, and laughing mildly. Mrs. Green pointed to her nephew, the young Horace. He was fielding, and he had just caught a ball so cleverly that the whole field, and those of the spectators who

understood the game, were moved to loud applause. "Horace has been twice the man that he was since the young ladies from the Rectory appeared on the ground," she said.

And presently the young Horace, his side being "in," came up to be introduced, in due form, to Miss Nina. The boy looked very handsome in his suit of white flannel, with a band of pale green round the cap and sleeves. On his face, healthily bronzed by air and exercise, there was a flush of excitement which

"Because there's to be a party to-night," he went on, gaining courage as he proceeded, "I dare say you have heard of it, and a tent on the lawn, with Chinese lanterns and flowers, and all that kind of thing. I don't generally care for parties: so many girls are slow; but I shall like it if Miss Winstanley and you are to be there."

"Are you sure that you won't find me slow?" said Nina, raising her eyes mischievously to the face of her young adorer.



"HARRY ELMTREE HERE RUSHED IN AND DRAGGED ME OUT" (*p.* 230).

heightened the effect of his undeniably good looks. His manner was bashful in the extreme, but he was not in the slightest degree awkward or ungraceful. I felt friendly towards the boy, when, as he stood near Nina explaining the game to her, I saw her colour rise, and an expression of real amusement come into her face.

"Oh! yes; it's really a splendid game, I assure you," I heard him say, "and some girls play it uncommonly well, and understand all about it too."

Nina asked if he thought she could play, but he answered doubtfully; and after a few moments' silence spent by him in looking on at the game, but in spite of his deep interest in the result, looking out absently, he asked if she was coming to his aunt's house that evening.

Horace seemed unable to find a suitable answer.

We were standing inside the little pavilion, where the refreshments were laid out, and while Horace was paying his court to Nina, another member of the club, an old play-fellow of mine, was relating to me with boyish exaggeration the history of a certain football match, wherein he had played the part of wounded hero. The papers had commented on his fortitude.

"Ridiculous!" he said, with a delightful air of superiority to effect. "They think it proper to say such things, but fellows don't howl when they are hurt, as a general rule."

This so amused me that I lost a part of the conversation between Nina and Horace. But my young friend, who was not so deeply interested in me

as to be forgetful of the interest of the game, ran off to examine the score; and I for a few moments was left unattended. I looked round. Horace, with the air of a young courtier, was handing Nina an ice.

As she took it from him she said, in a lower tone than she had used before, "And I can depend upon you?"

"Of course you can," he answered with enthusiasm. "Look here, Miss Nina, there never was a more secret fellow than I; you just ask my aunt, she'll tell you. Why, I make her as cross as possible sometimes by not telling her things."

"Very well," Nina replied with composure. "Go and look after the game just now; I will see you again presently."

The afternoon was advancing. The sun, low down in the horizon, poured his slanting beams through the tree-trunks; there was scarcely a cloud to temper his brilliance; the air was hot, sultry, and still.

"Surely there must be a thunderstorm soon," said one and another, crowding about the spread tables in the pavilion for rest and refreshment.

"Electricity in the air," Colonel Green remarked, pouring out for himself a tumbler of iced claret-cup.

Miss Ashley stood at his elbow. Where had she been? she seemed to me to have sprung from the ground, so sudden was her appearance on the scene. She said, "Yes, the air is charged. There will certainly be a storm soon," and she added, looking at me, "It is well to be prepared for all contingencies."

I would not return her glance, for I believed that it meant something, and I was troubled and perplexed. Had she, as well as I, heard Nina's words to Horace? Had she any idea of their meaning?

"I think our tent is waterproof," said the colonel, "but a fine night would be much pleasanter for our party."

Miss Ashley smiled. "Oh! young people are not particular." Nina was moving towards the front of the pavilion. "You find it too warm, dear?" she addressed her benevolently.

"It is fair to leave a little space," Nina answered.

Miss Ashley made an effort to follow her; she was detained by the colonel, who wished to introduce to her a gentleman about to settle in the neighbourhood. "I tell him you can give him every kind of information," he said; "you must persuade him to come; he will be an acquisition; he has a large family of boys and girls." "Charming and accomplished young people," filled in Mrs. Green.

Miss Ashley made an effort to look benevolent; but it was not a very successful one. Her thoughts were with Nina. My friend, young Harry Elmtree, here rushed in, and dragged me out to see how "awfully well" his eldest brother was bowling. "I wonder where Horace Green is," he said, casting round him a glance of searching inquiry; and he further remarked, with no little discontent in his tone, that "spooning" was all very well in its way, and he didn't object to do a little of it himself at proper times; but for a fellow to lose the best part of a game just because there happened to be a pretty girl upon the ground was not "good form." Upon Horace continuing invisible, he became much displeased. He observed that girls always spoiled everything; but for a mild protest from me, he would have wished them out of existence; and he was in the midst of a complimentary remark to the effect that, taking me altogether, I was much more like a boy than a girl, when we caught sight of the pair for whom we were searching. They were at the further end of the ground. "What can he be doing out there?" said Harry discontentedly. "It's perfectly ridiculous. He can see nothing, I'm sure. Oh! well done! well done!" as one of those deadly balls hit the wickets. "That's a finish—the game is ours."

He threw his cap into the air. There was a general movement in the field; the thirsty heroes came in a flock to the pavilion, to be refreshed and congratulated. It was decided that there was not time for another innings; and indeed the conquered side could not possibly have recovered the ground lost in the last sharp struggle. The day was ours. "Horace Green! Horace Green!" was shouted on all sides. He came running across the ground. My eyes had been on him and Nina ever since we had discovered them; and I was convinced that there was some secret understanding between them. I had distinctly seen a letter or packet of some kind pass from her hands to his.

I went to meet Nina, as she, at a more leisurely pace, followed Horace. "You are enjoying yourself?" I said, "you intend to stay for the evening?"

Up to this, I had not been able to obtain from her a decided answer. "Oh! yes, I will stay," she answered.

Mrs. Green came bustling up to us. "You can go in by the side-gate, dears" she said. "I must stay for a few moments to get together the party for dinner. The blue-room, Mary. I can trust you to do the honours to your cousin. Dear me! dear me! where is that boy Horace? He is as slippery as an eel to-day. I no sooner think I have caught him than he's off again." She shook her finger at Nina in playful wrath.

"It is not Nina's fault this time," I said, as she continued to look about her doubtfully. Young Harry Elmtree came up and offered his services.

"Horace sent me," he explained, "I fancy he's off to the village or somewhere."

"But if he has gone to the village, he cannot possibly be back in time for dinner," Mrs. Green said.

"Well! that's exactly what I wanted to tell you," replied Harry. "He sent me to say don't wait. He'll pick up a snack of something as he goes along. Good-bye, for the present, Mrs. Green; my people are waiting for me."

Mrs. Green looked thoroughly bewildered. "I never knew Horace act so strangely before," she said. "I only hope his uncle will not be vexed," and therewith she hurried us in. Dinner was to be earlier than usual, that there might be plenty of time for the party afterwards.

I believed Nina had something to say to Horace's

disappearance, and when we were alone together in the bed-room I taxed her with it. "You know where Horace has gone," I said. I stood behind her at the moment, fixing a deep crimson rose in her dark hair, and I could not see her face.

But she answered me with perfect composure, "Yes, he told me, as he told Harry Elmtree. He has gone to the village."

"You sent him there?"

"Why? what makes you think so?"

Though not the accused, I was the confused one now. The colour mounted to my cheeks, and my hands trembled.

"If you handle that rose so roughly it will drop to pieces," said Nina, taking from my fingers the flower I was about to adjust in my own hair. "There, sit down; now tell me, why do you think I sent Horace away? He is a very charming boy."

"You gave him a letter."

"Oh! yes, so I did—I had forgotten to leave it—as he was going that way—Mary, you look lovely! How do I look?"

"You know you always look well, Nina. But about this letter. Was it for the post?"

"Little cousin," she said, kissing me, "don't ask any more questions. I am very volatile, I told you so before. I like to do things my own way. And don't watch me. I am quite serious now; for your own sake, don't; you might make a mistake which it would be difficult to unmake."

"Nina"—I made one more desperate attempt to gain her confidence—"why are you so mysterious with me? I would keep your secrets. Why do you tell things to a boy like Horace, and leave me in the dark? I could help you better than he could."

"Darling," she answered me—and there was a winning smile on her face, which made her very fascinating—"I have told no secrets to Horace. I only asked a service from him. He was ready to serve me blindly; I saw that in his face. You would not have done it, Mary; I could not have asked you. Say I had begged you to take a blank note and place it under a stone in a particular spot—the churchyard perhaps—what would you have said?"

"I should have wanted to know, certainly, why you did it. But surely you did not ask Horace to do such a thing."

"That or something else. I gave it as an example, and you see I was right. You would not have trusted me so far. He, I believe, would trust me to any extent."

"And so would Eugene," I answered, my heart rising indignantly.

"But Eugene is not here," she said, "and even if he were——" She paused.

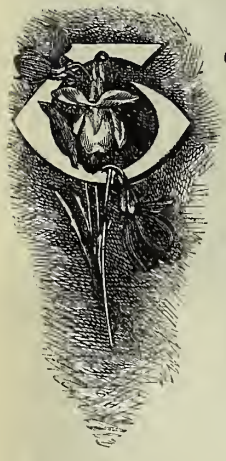
"Yes, if he were?"

"Why, I could not make a servant of him; how could I?"

"Then"—but she would say not another word.

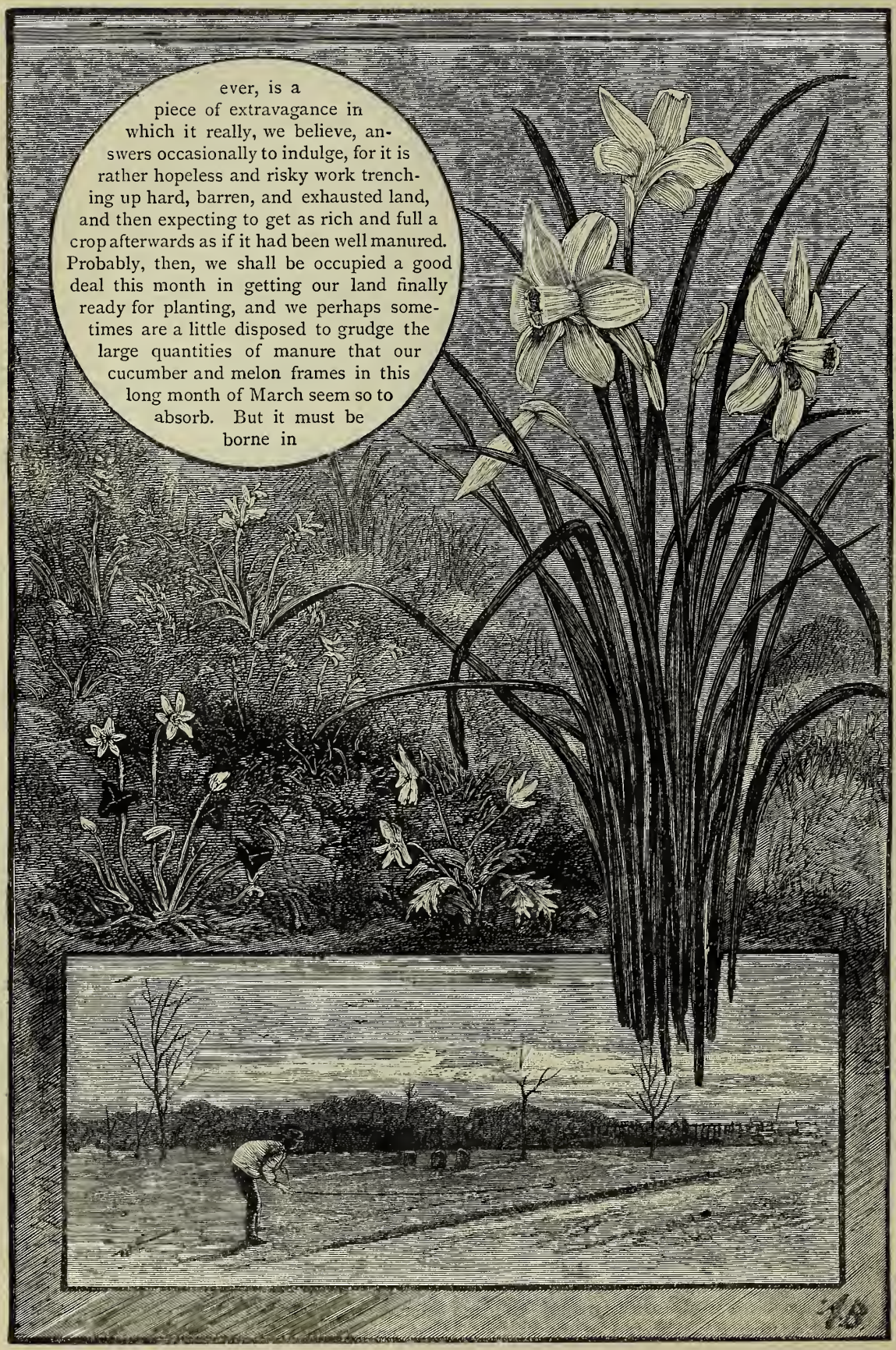
END OF CHAPTER THE TENTH.

GARDENING IN MARCH.



TOWARDS the end of last year gardeners were certainly able to congratulate themselves; we say "gardeners," for we do not intend to draw any distinction between the amateur or proprietor and the conscientious labourer, more popularly known as "the gardener." And the reason for their mutual satisfaction was this: they were able to get a larger amount of work done before Christmas than has certainly been the case for several seasons. Through November, and even in December, that early morning music, which is now growing more rare since the introduction of the mowing machine—we mean the duet between the "rubber" and the scythe—was by no means uncommon; indeed, a fortnight before Christmas we noticed what might almost be called gardening anachronisms, for with the Christmas roses came also in some parts of the country primroses, and in the kitchen garden the rhubarb was well showing its pink knots above the ground. The lawn also, as we have said, wanted keeping short, and the fine three or four weeks of mild, open, and dry weather from the latter end of November to the middle of December enabled us to push forward at a time when, in 1879, the gardener used to be fond of sending in to get leave for an hour or two's skating, as there was nothing for him to do.

Our shrubberies, then, let us hope, for one thing were got into a good and orderly state by the end of the year, owing to the dry weather after the fall of the leaf. Indeed, it is next to impossible to do much upon the soil after long and continuous rains, and difficult to get away to other parts of the garden all those dead and decaying leaves that are lying about in great soaked and sodden heaps. And where our operations are carried on not on a very extensive scale, and expense, or rather the saving of it, is a question of importance to us at every turn, we get all those leaves together, with any other decaying *débris*, to help us in manuring the land. Now in ordinary-sized gardens, such as that of which we generally wish to treat, twenty loads of manure—inclusive, that is, of what we require for our cucumber and melon frames in the month of March—is by no means a very out-of-the-way supply. But manure costs on an average some five shillings a load, and paterfamilias often looks twice before he makes up his mind to spend a five-pound note upon such an odoriferous luxury. This, how-


ever, is a piece of extravagance in which it really, we believe, answers occasionally to indulge, for it is rather hopeless and risky work trenching up hard, barren, and exhausted land, and then expecting to get as rich and full a crop afterwards as if it had been well manured. Probably, then, we shall be occupied a good deal this month in getting our land finally ready for planting, and we perhaps sometimes are a little disposed to grudge the large quantities of manure that our cucumber and melon frames in this long month of March seem so to absorb. But it must be borne in

mind that this manure we afterwards utilise for other garden purposes, and our frames which we are now so busily engaged in preparing are exceedingly useful for forcing our especial and favourite flower-seeds in pots; and there is, we at once notice, plenty of room under our glass, as soon as the heat is up and the temperature fit for use, to place our pots or small narrow old boxes all round, leaving ample space in the centre for our young cucumber or melon plants. The foundation too of our cucumber frame is made up of rough and coarse rubbish, so that we need not take alarm at the sight of the large square or oblong hole that maybe we have just dug out on the site of our intended frame.

Now, in our green-house the month of February is for the most part considered the month for general re-potting; but as we not unfrequently get some of our keenest frosts and most trying weather in the very early spring, it is often advisable to postpone to the present time this most important operation: that is to say, the condition of the weather must actuate us. Begin, then, with the most hardy and vigorous of your plants; sometimes also your plants are benefited by merely placing fresh soil in the old pots, taking out first of all for that purpose a large portion—not necessarily all of it—of the old and worn-out soil. This little contrivance is of especial use when we find ourselves running short of pots. Give also to your weaker plants—indeed we may say in all cases—the smaller pots, and the soil you then use should be as little rich and exciting as you can manage it. Pots, by the way, that have been previously made use of should always be thoroughly well cleaned and washed both inside and out before being used again. General cleanliness, indeed, is the secret of the health and well-being of your green-house stock.

It has been said that cuttings, if they can be got in a proper state at this time, will flourish better and take firmer root than those taken even in the heat of summer or later on in the autumn, the reason probably being that this is really the first month of the year in which nature is making a great start. Of course we are speaking of cuttings that are under glass, the gusty, stormy, and so often frosty month of March not certainly giving us much hope in experiments of this kind in the open. Our green-house bulbs will now be rapidly coming on into flower. They will require a careful watering, and let them have all the light you can give them. We will go then carefully round our green-house, and selecting a few flowers, give a few general directions as to their routine management for this month. Notice then, first, these chrysanthemums, upon which we so much depend for beauty of florescence in the wane of the year. From the old "stocks," as we call them, of the old plants take off, then, those young off-sets or suckers, and pot them singly. You must get them off pretty close to the base, nor need you fear if you get off but little root with them. When potted off, they will require a merely moderate warmth, but all the summer stand them out, and do all you can to get them as hardy as possible. You might also now propagate some Neapolitan violets for winter flowering; the runners should be planted in a light rich soil, and by the following autumn they ought to be good little sturdy plants.

Attention now, of course, must also be paid to your azaleas. Many of these towards the close of the month, and more especially if we get any genial weather (and we never can tell in this fitful climate of ours what season we are to have), will be showing for bloom. Be sure, then, and give them a careful watering, for if you allow these beautiful plants to get quite dry the probability is that not a few of your blossom-buds will fall off. Like the camellias, these plants show us their buds for a long time before the buds actually expand into flowers; and this brings us to say a word or two here as to the camellias themselves. The majority of camellias have done flowering by the end of March, and in this case see to the shifting of all those plants that you think have out-grown their pots; or if there be any that you do not think it necessary to re-pot, at all events see to their drainage: make this quite perfect, and then renew the surface soil. Both azaleas and camellias after they have done flowering want standing in a good temperature, perhaps from some sixty to sixty-five degrees; this facilitates them in their annual growth and helps them to make their new wood. During this time they like a moist atmosphere and a good syringing. If you are fortunate enough to possess a small vinery, you cannot perhaps do better than stand them in here for a time—that is, until their new growth is complete. But, on the other hand, do not for a moment suppose that for the entire summer these plants will require similar treatment, for as the warm weather comes on they are turned outside; but of this we shall hope to speak in its proper season.

From this month until our bedding-out season at the end of May—alas! we dare never as yet to advocate this delightful operation at a *much* earlier date—we often, those of us who have to make shift with a single glass-house, find ourselves seemingly more and more cramped for room; for we see our whole green-house stock almost daily increasing in size; the little green arms of our pelargoniums and other plants seem to grow, vulgarly speaking, as we look at them. All the more important is it, then, to give ventilation when we can—certainly daily—also to keep a sharp look-out against an invasion of the Aphis, that terrible green-fly, which as soon as it makes its appearance rapidly overruns your entire house, unless prompt measures be taken. There is no remedy that we can suggest better than fumigation by burning tobacco. Let your house then presently, with closed door and lights, have the appearance of passing through a good thick London fog, and the next morning, when your smoke has passed away, you will find all the myriads of your little green-fly lying dead on the soil of your pots.

We were speaking last month of the alteration and preparation of the lawn for tennis as well as for a floral display of beds, which last we have perhaps now transferred to the borders of our lawn. It may be well, then, after any movement of turf, to pay a little atten-

tion to any new turf that we have had occasion to lay down. We shall probably find it of a different texture, so to speak, from the older and undisturbed part of our lawn. Carefully, then, take the scythe over the new turf, and get out as you see them growing any little coarse lumps or pieces. Indeed, your lawn will require, after all the alterations of which we spoke in the month of February, some considerable time before it again assumes an appearance of uniform growth. Have it well rolled too, and if you see any holes or ugly slopes that can be avoided by a little labour, but which, if allowed to remain, would materially interfere with anything like a very professional game of tennis, take up some of your turf with a view to getting a good and accurate level. Very often too one end of the lawn—generally that which gets least sun—is disposed to be damp and slippery: if so, you might have a small system of drainage by means of two-inch pipes; or if that cannot well be contrived, take your turf carefully up—*very* carefully—where it is disposed to be wet and rotten, and try a foundation in your subsoil of a few brickbats and rough and hard odds and ends—some, perhaps, of those dreadful lobster and sardine tins, which the dustman never cares to remove, and which no one quite seems to know what to do with, any large flint stones, &c., and then, after giving a light allowance of soil over all these, replace your turf. This, we think, will make the damp end of your lawn a little drier and more pleasant.

But the space at our disposal is rapidly filling up, and it is difficult to know whether there is more to recommend than we can actually accomplish in the garden, or more to do than we can speak of. Our standard roses, then, must be carefully pruned this month. Get off first those long, thin, spindly branches close to where they spring from, and shorten also the strong shoots. Much in all this will depend upon the shape of your tree, its condition, its strength, its age, and the form also that you may be wishing it to assume. In this operation experience is of great service, and it is well, if you can, to watch first of all the movements of a practised hand.

It is hardly wise, perhaps, to sow before quite the end of the month the seeds of your hardy flowering annuals; the half-hardy, of course, will require sowing in gentle heat, and then can only be planted out when mild and really spring or early summer weather has set in. Your tulips and hyacinths too in the open will need support and protection, especially where the head is heavy for blossom, as one heavy gale or storm—and how often have we seen by this means the destruction of a fine show!—would probably snap them off short. And in the kitchen garden too we are very busy sowing, stocking its entire length, no doubt, and carefully looking over our asparagus bed. The great thing to avoid is using the same space of ground for the same class of vegetables year after year. Indeed, it has been said, and with much probable truth, that our continued recurrence of potato disease may in some measure arise from planting potatoes on land that produced a diseased and failing crop in the previous year, without first paying proper attention to the entire manuring and renovation of the soil. Let us earnestly hope this year for a good crop of what is all over the country such a staple food. And our wall-fruit too we are anxiously watching, after the terrible failures of last year. Indeed, from now until May we are in a fever first over the blossom, and afterwards over the young fruit when it has set. Ingenuity and care will tell here. Our old and discarded drawing-room muslin curtains are of use for protection, or matting and thin canvas, &c., for in old England we gardeners are rarely "out of the wood" much before the voice of the cuckoo is "out" also.



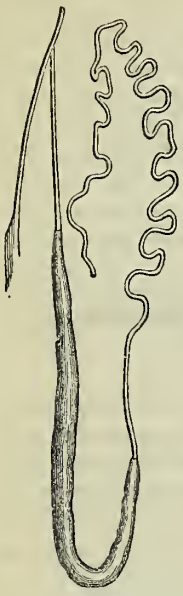
PORTSDOWN HILL.

GREAT, grand down, where the breezes are,
And the daisies sprinkled over the grass,
Sound of the mighty thunder of guns,
And sight of the stately ships that pass.
Oh! the shine of the far-off sea,
Blue, oh! so sunnily blue to-day:
Out from the "Haven under the Hill,"
Great war-vessels are sailing away.

Clear-cut line of the Island hills
Shines from the mists that are floating by;
Tall, black masts that rise from the sea
Straight, dark, and steady against the sky.
Rippling light of the harbour waves,
And gleams of sun on the town below.
This we saw as we sat that day,
Up on the down where the breezes blow.

L. G. M.

OUR SILKWORMS, AND HOW WE TENDED THEM.



SILK-SECRETING APPARATUS.

IN the middle of our garden at Redland there were two trees, on the possession of which we plumed ourselves not a little, first because they were both useful and pleasant, and secondly because they were the only ones of the kind in the neighbourhood. One of them, a nice, round, flourishing specimen, apparently of no great age, standing in the middle of a grass plot, was a white mulberry-tree; and the other, near a wall which cut off a piece of ground formerly included in the garden of our house, was an old, gnarled, red mulberry, whose large limbs had many times been lopped, and round whose trunk was a wooden seat, which greatly facilitated our ascents among the branches in quest of either fruit or leaves.

We hardly knew the treasures and resources of our new home at first, but they came to light by degrees, and our attention was particularly drawn to the mulberry-trees during the first spring we were there by Tom's schoolfellows, among whom there was a tradition of their existence, as well as a current opinion that silkworms throve much better on mulberry than on lettuce-leaves.

"Do bring us a few, Sinclair, there's a good fellow," was the request of first one and then another boy, till father began to think his trees would be stripped bare; for it is a curious fact that where there are a number of boys together there is not much variety of taste, but whatever pursuit is taken up by one or two becomes a universal fashion for the time being. Tom naturally wanted to follow the lead of his friends, but father suggested that he should endeavour to learn wisdom from their experience that season, and that another year they would take up something else, and he might indulge in silkworm culture for himself under the most advantageous circumstances; and to this advice Tom, at that time pretty well occupied with the education of his bullfinch, lent a tolerably willing ear.

When the next spring arrived, father, who never forgot any of our little wishes, brought home half an ounce of silkworms' eggs as a small present for his eldest son on his return from a short absence in London; and as mother said she would rather not have them either in any of the rooms we occupied or in the greenhouse, she gave up a sort of closet, which had a very large window, but was not of sufficient size to be of any use as a bed-room, while, being next to the bath-room, it shared the benefits of the hot-water apparatus, and was always very warm. Tom really meant business with regard to his worms, and father and he did a good deal of carpentering in preparation for them, for they put up a great many shelves round the sides of the closet, one over the other, about twenty-three or twenty-four inches apart. They were rather to be called movable frames, though, than shelves, for they consisted of slips of wood, on which some very coarse net was stretched, and which slid into grooves, so that they were easily taken down and replaced. I think they were about two feet wide; and over the net sheets of thickish white paper were laid. A small thermometer was hung up on the wall, and the heat was 75° with the window closed, which father said would be just about right for hatching, though he lowered it by opening the window and drawing down the blind afterwards, and kept it at 67° and 68° as the worms advanced towards maturity. The next requirement was some shallow cardboard boxes, some few of which we found among mother's stores; but Jenny and I made the greater part of them, as most of the boxes we begged were too deep for the purpose. A few eggs were put into each receptacle, and we covered the tops with pieces of tarlatan and leno. This was all done just when the mulberry-buds were beginning to burst, and the young leaves in the most tender and juicy condition imaginable. Father told us the little worms would be hatched in a day or two in so high a temperature, and directed us to get a chopping-board and knife, with the aid of which we reduced a quantity of mulberry-leaves into a sort of green mincemeat, which was spread over the tarlatan.

Tom was inclined to think that all this chopping was a work of supererogation, and that the silkworms would do very well without it. "Other fellows never take so much trouble," he said irritably.

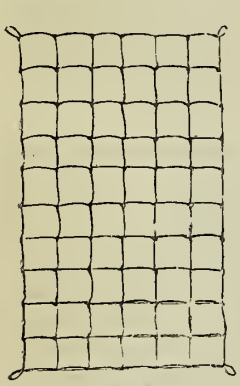
"Other fellows' worms die of starvation; and the few they have to show are only examples of the survival of the strongest," replied father; "and if you keep living creatures at all, I like you to attend to their wants in the best possible way."

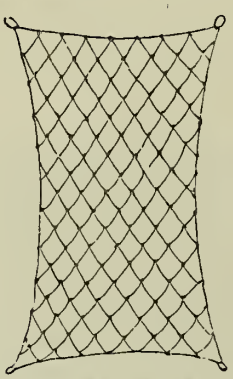
Tom knew very well in his heart that father's way always was the best, and we heard no more grumbling about the extra trouble, which after all did not fall very heavily, since it was gladly shared by the rest of us. The reason for chopping the leaves so finely was to present the greatest possible number of fresh-cut edges to the baby-worms, which, as soon as they emerged from the eggs, crawled through the tarlatan and began to feed. As fast as the inmates of each box were hatched we transferred them to the frames prepared for them, using the tips of paper-knives to move them and the bits of leaves to which they had attached themselves. Father told us on no account to touch them with our fingers, as it would be nearly impossible to avoid injuring them by even the slightest pressure; and I cannot say that I ever had any desire to handle them, for I was possessed with an idea that I should inevitably "squash" their very soft-looking bodies.

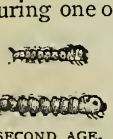
We provided a fresh supply of food and scattered it among them every six hours, unless we saw that they had not finished the previous meal, in which case they had to wait a little longer. When there had been any rain we dried the mulberry-leaves carefully before chopping them, and found that the best way of doing it was by tossing them about in a clean cloth, an operation in which baby considered that he rendered the greatest possible assistance to his brother and sisters. We were rather alarmed when the worms were a few days old by observing that they looked like rusty-brown scraps of string or wire, and appeared perfectly torpid; but father told us that they were only preparing to cast off their first skins, which they soon did, recovering their appetites immediately afterwards, and being removed as before to fresh clean frames, while those on which they had passed their first stage of existence were repapered and prepared for those which would "slough," or moult, next; and as they had originally been put into their trays in the order in which they had been hatched, we had relays of them at each successive change instead of all casting their skins at once, or those which had and those which had not reached that epoch being mixed up together. Father was by no means satisfied with our method of moving the worms, and busied himself during one or two evenings in cutting some stiff sheets of paper for us, in imitation of some he had once seen in the south of France, where the rearing of silkworms is carried on upon a large scale. There were a great many spaces, so that when completed it looked something like a paper-net, and on these he directed us to lay our leaves, no longer chopped, but cut in good-sized pieces. When this was done, we laid the new contrivance gently down on the tray we wished to change, both for cleanliness and for the purpose of giving fresh food. The worms showed themselves to be very much alive to the difference between new and withered leaves, and speedily crawled on to the fresh ones, so that when we carefully raised the corners to see what measure of success attended this experiment, there was hardly one left in the old place, so we were able to lift up the cut paper, throw away the dried-up dirty litter beneath, put in fresh sheets, and deposit our charges in clean habitations. It was now only necessary to give them four meals a day; and all went merrily till they seemed to grow sleepy and inactive again, when we gave them fewer leaves at a time, and, when they quite ceased to eat, left them unmolested till they showed signs of awakening, when we shifted them, or rather allowed and encouraged them to shift themselves, as on the last occasion. This time we saw there were a good many remaining on the old food, which looked larger than those that had changed their quarters, and were shiny. Father told us to make haste and throw them away, for they would soon die, and cause a smell which would be unpleasant for us and unhealthy for the other worms. I believe these are called *luisettes*, from the shiny appearance I have mentioned, and they are the unfortunate individuals which have not the strength to moult. We still gave the others four meals a day, the first being as soon as we were up in the morning, and the fourth the last thing before going to bed at night. We changed them daily, but, though father called this a little excess of zeal, we had learned to cut our own papers, mulberry-leaves were plentiful, and it was better to err on the side of too much than of too little cleanliness. We continued to find more *luisettes*, and the number of our worms sensibly decreased, till we saw the fifth change approaching, which father said was the most critical of all. The worms seemed as though they were dead, and continued in that state for nearly or quite forty-eight hours, emitting a sickly, disagreeable odour. When they awoke from this last moult, father looked them very carefully over, and picked out a good many


EGG AND FIRST AGE.


POSITION WHILE MOULTING.

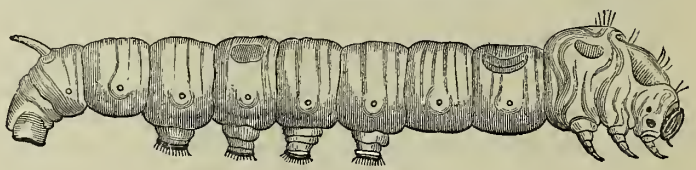

SQUARE NET.


LOZENGE-SHAPED NET.


SECOND AGE.

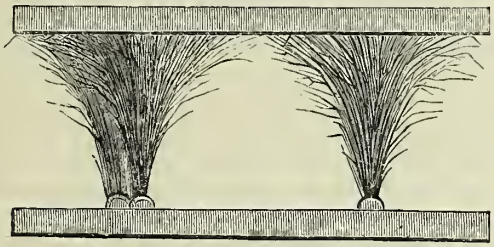

THIRD AGE.


FOURTH AGE.


FIFTH AGE.


HEAD OF SILKWORM DURING MOULTING.

which were so exhausted by the change in their systems that they had not even strength to eat; some yellowish fat ones, which he said would not live long; and some idle corpulent creatures, which appeared to have over-eaten themselves so much during the previous stage of existence, that even their long fast had been ineffectual in counteracting the evil effects produced by gourmandising. Tom looked blank at this wholesale thinning of the ranks, but father told him it was necessary for the well-being of the rest of the community. The healthy survivors had the most prodigious appetites, and we could almost see them grow, and on the fifth or sixth day they had got so large that we had gently to remove them to a respectful distance from each other. It was no longer needful to cut up the leaves for them; but at last they ceased to eat, had a white, pearly appearance, and kept on crawling to the sides of the frames and there raising their heads and the upper parts of their bodies, as if they wished to climb or rise up on something. Father said they wanted to spin, and got some dry heather, which he set up, with the aid of a little wire and a few tin-tacks, in the shape of a sort of arbour over

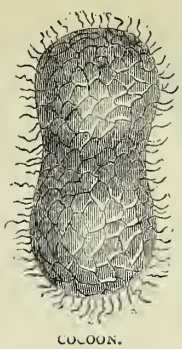


SPRIGS OF HEATHER FOR SILKWORMS TO MOULT IN.

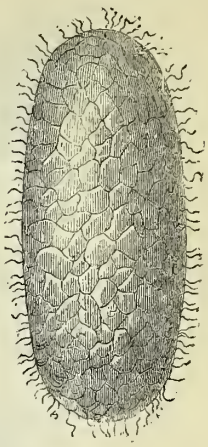
each frame, not bunching it together, but spreading it out so that the air might circulate freely among it, saying that the cocoons would be of little worth unless they had plenty of air.

This was evidently what the silkworms had been in search of, and most of them soon crawled up into the heather and selected the most convenient corners wherein to spin their cocoons. Some, however, though of the same size and colour, and apparently in the best of health, showed no disposition to avail themselves of the branches arranged for their accommodation; and father set us to work to remove these singular individuals into trays by themselves, and lay some pieces of heather across them. This suited them better, and underneath or upon the twigs so placed they spun just as good cocoons as their more ambitious relatives.

We reckoned that the half-ounce of eggs had produced nineteen or twenty thousand worms; but though a great many of these had come to an untimely end, we still had plenty of cocoons, and could not have wound off all the silk before the insect within had eaten its way through, however much we had tried. So father told us to make some coarse flannel bags in which to put them, and we coaxed cook for the loan of her potato-steamer over a saucepan of boiling water, where they steamed for half an hour; and

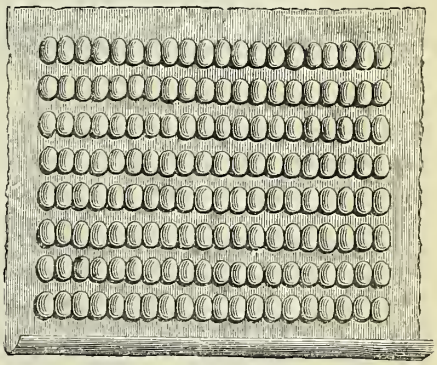


COCOON.



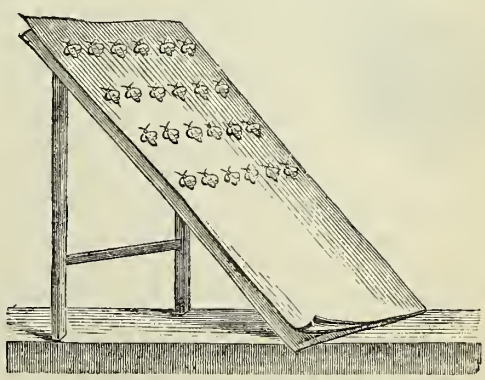
SPHERICAL COCOON.

while this was being done, Tom cleared out some of the empty frames on which the worms had been fed, taking away the paper, and we put the cocoons carefully on the net to dry. Father said we must turn and move them occasionally, as we had seen mother do with the eggs she saved for winter use, and that we must not pile too many of them on a single frame, for fear they should ferment and the silk be spoiled. Then came the winding, for which Tom made a little wheel, after one lent him by a schoolfellow; and one day he took his silk down to the city, found that it weighed two or three ounces, and made what he thought a famous bargain in selling it. I do not remember now how much he was paid for it, but I do not forget that he brought each of his sisters home a little present as an acknowledgment of their help. Mine was a small pincushion made to fit into a mussel-shell; and though long years have passed since then, it still has a place in my work-box.



SHEET OF PAPER WITH ROWS OF COCOONS.

Next year the silkworm experiment was renewed, and, in fact, continued as long as we lived in that house. On one occasion we were persuaded to bake,



SHEETS OF PAPER STUCK INTO SCREENS FOR THE RECEPTION OF MOTHS.



SILKWORM MOTH (MALE).

instead of steaming, our cocoons; but that process could hardly be considered a success, as the silk did not wind so easily and was not nearly so bright and soft as under the original method of treatment. I



SILKWORM MOTH (FEMALE).

believe the reason of this is, that the steam softens and dissolves the glutinous matter among the silk, while the baking hardens it. Our silk was of a pale yellow colour, and the cocoons of middling size. I have seen larger as well as smaller ones in my time, but they are all the produce of different races. We kept half a dozen cocoons unsteamed, so that there might be a few moths to lay eggs for the next year. Father said we could only judge which were the male and which were the female ones by weight, as the latter were the heaviest, and fetched a tiny pair of scales out of the family medicine chest, so as to make sure about it. We saved three of each, and he told us to fix the three heavy ones on one sheet of brown paper with a little paste, and the others on another sheet in the same manner. The moths were hatched about twenty days after the full-grown caterpillars had first mounted into the heather to spin; and in due time plenty of eggs were laid on sheets of paper placed ready for their accommodation. These sheets were hung over a thin line of fine string up in a dry attic till spring came round again.

In after-years, when we no longer had a garden containing a mulberry-tree, baby, who had grown into big boyhood, kept a few silkworms for his own pleasure, which, not knowing the taste of mulberry-leaves, grew up on a diet of lettuce; but a great many of them died, and their silk appeared to me far from superior in quality.

Tom once had some eggs of a Japanese silkworm sent him, with directions to feed the larvæ on oak-leaves. They were much larger than the ordinary kind, but healthy and hardy, and of a green colour. The cocoon was also of a brightish green outside, though the silk was beautifully white within. We experienced no difficulty with them, and I believe it is thought that they may one day supersede the mulberry-feeding worms, as they are subject to fewer diseases, and oaks are plentiful and grow in large numbers much farther north than mulberry-trees, though the latter are hardy when once acclimatised, as may be seen by those that flourish in the gardens of old-fashioned houses in the East-end of London, where they were planted long years ago by the French families who found refuge on British soil after the repeal of the Edict of Nantes.

RECENT PROGRESS IN THE CHANNEL ISLANDS.



IF this interesting group of islands were a thousand miles distant we should perhaps hear more about them than we do, but as they are so close to England they come to be regarded almost as an English county. Yet their fortunes and conditions are very distinct, and we find them classified by the Board of Trade as one of the British colonies. Possibly, if Messrs. Pell and Read, of the Agricultural Commission, had visited the miniature farms of Jersey, Guernsey, and Alderney, they might have obtained some practical knowledge, as useful as any they acquired in North America; for it is a significant fact that the farmers of the Channel Islands are prosperous, while paying five times the rent usually paid in England. Another remarkable fact is this, that the population has slightly declined (being now lower than in 1860), and yet the value of exported products has risen 72 per cent. in ten years. Meantime the number of visitors every year increases, not even the oldest inhabitant remembering such an influx as there was in the last season, Jersey alone counting 33,000 arrivals in two months.

The whole group of islands has an area of only 48,300 acres, or half the extent of the Isle of Wight, yet it supports a population of 90,000 souls, showing a ratio three or four times denser than Belgium or China. Still, the population is relatively but a handful, and it seems incredible, but is nevertheless shown by official returns, that Great Britain carries on a trade of £1,500,000 annually with the islands, which exceeds our commerce with Mexico, Venezuela, Ecuador, or Uruguay. Such economists as believe implicitly in the "balance of trade" would argue that these islands are hastening to bankruptcy, since the aggregate of ten years' imports has been 33 per cent. over the exports, viz.: imports, £8,429,000; exports, £6,351,000;

surplus imports, £2,078,000. Notwithstanding these figures the wealth of Jersey has grown prodigiously, and Jersey holds the same ratio to the whole group as regards population, trade, &c., that England does to the United Kingdom. But whichever the islands you may visit, the inhabitants impress you with their thrifty habits and industrious character. The value of their exports, which was £5 per inhabitant ten years ago, stands now at £8 a head—a higher ratio than in the United Kingdom. These islanders are also among the best customers for English manufactures, as they consume British merchandise to the rate of £9 per head, against £7 in Australia, and £2 in Canada. Strange to say, they do not form one Government, nor possess a united Legislature. Jersey has its own Governor and Chambers, while those of Guernsey comprehend also the smaller islands. Loyalty to the English throne is the ruling passion of the people, whose attachment to England is greater than any identity of interests with the British Empire, so much so that they regard Scotchmen or Irishmen as foreigners. Courteous and hospitable to all, they have, nevertheless, a decided aversion to Frenchmen, although speaking their language; and so jealous are they of their rights (which are confirmed in numerous charters from English kings) that they will not allow an Englishman to sit in their Legislature, although, of course, a Jerseyman may sit in our House of Commons, the same as a Scotchman or a native of London. If we are to judge of their intellectual standing from their system of schools and the character of their press, the conclusion will be highly favourable. French and English are taught in most of the schools, and as the school-children form 13 per cent. of the population, it is not surprising to find that everybody can read and write. Some of the newspapers are in French, others in English, fully on a level with the papers of English provincial towns. But all classes have an unexplained repugnance to statistics, the same as in Ireland and in certain counties in England, as well as in our own colony of Hong-Kong.

At the first newspaper-office where I called and inquired for the editor, I was told that he was never visible by day or night, so I judged that he only existed in the abstract, or resembled those heavenly orbs whose light falls upon the world while themselves are beyond our reach. I then tried a second office, and found the publisher, who requested me to write to the editor, and promised to get me any information; but when I told him that I sought after statistics, he promptly replied, "They are the most expensive things in Jersey." He explained to me that even to obtain Custom-house returns cost him a round sum and much patience. Nothing daunted I went to another office, and on my telling the overseer that I was a member of the Statistical Society of London, in quest of some information from the editor, he went behind a screen to confer with his chief, to whom I heard him say that I was "a member of the Secret Society of London." The editor came out to look at me with a visible expression of dread and mistrust upon his countenance. I hastened to assure him of the innocent nature of my business, adding that his colleague of the *Express* had referred me to him as the only likely person in St. Heliers to know about death-rate, vaccination, schools, rural products, police, and such general matters. He frankly confessed to me that he had never thought of such things, but he was kind enough to lend me some books concerning the islands.

There is, however, an air of prosperity about St. Heliers that speaks as eloquently as blue-books, and whether you walk through its bustling streets, in which the citizens seem as crowded as in Genoa or Cairo, or ascend the hills upon which the delightful suburbs are built, you feel that you are in the midst of a thriving people. There is also a degree of refinement which favourably impresses the visitor, arising mainly from the character and habits of these descendants of the Normans, and in part from the circumstance that numbers of well-bred Englishmen, especially half-pay officers, have settled with their families at St. Heliers, lending a distinctive mark to its society. It is no longer such a cheap place for living as it used to be, but it still enjoys a charming climate, which makes it as pleasant a winter residence as Algeria or the Riviera, while it is only distant eighteen hours from London. The necessaries of life are almost as dear as in England, and rent in the suburbs is about the same as at Hammersmith, but the taxes are so small as to be said not to exist. If you go inland a couple of miles, you may get a cottage or country house very cheap: at Mont l'Abbé I saw a very pretty house with a well-kept flower garden to let, for which the owner asked me the modest rent of fifteen louis-d'or per annum, explaining to me that louis-d'or was equivalent to a pound sterling.

As the agricultural question was the matter that most interested me, I walked about the island and saw much of the natives, whose homes are like those one sees in Sussex or Devonshire. Many of them spoke French fairly, but the majority used their own dialect, the veritable Langue-d'oui of the Troubadours. Their mode of farming is more properly gardening, the extent of the farms rarely exceeding ten vergees, or four and a half acres English. A farm of this size will sell for £500, one-half of the price being usually paid in cash, the rest in mortgage certificates, which latter are as much valued as Consols. The ordinary rent is from two to three pounds the vergee, say £5 to £7 per acre. Apples and potatoes are the principal crops, but there is also a good deal of land under artificial pastures. Seaweed, which the natives call "vraic," is used for manure, generally in its natural state, and less frequently in the form of ashes. The soil is fertile, yielding four or five tons of potatoes to the acre, and as these come in early they command such prices at Covent Garden Market that it is not uncommon for this crop to realise £50 an acre. Orchards are, perhaps, still more the objects of attention, the trees bending down under the weight of fruit, while the absence of high walls or formidable fences shows the respect for property that prevails.

Small as is the island, it counts 15,000 cows and horses, and exports 2,000 head of cattle yearly, for the most part to England. The animals are never allowed to go loose when grazing, and on my asking a native the reason for tethering them, he told me the pasture was so rich that cattle would burst if not tied ; but I learned from another that the land was in this way able to carry four times as many animals as it would if they were not tethered. According to the Jersey blue-book the area under pasture is 9,400 acres, under grain 8,100, and orchards and kitchen gardens 8,800 acres, leaving a balance of only 2,410 acres as barren land. Most of the flowers and shrubs of English hot-houses grow in the open air, and among the climbing plants on the fronts of houses, I noticed a crimson one resembling the Santa Rita so common in Paraguay. The kitchen gardens are remarkable for a species of cabbage ten feet high, the tuft of leaves on the top giving it the appearance of a palm-tree. In no other part of Europe has the tenure of land varied so little in the past ten centuries. There are still the twelve parishes, as in the Norman epoch, each of which was originally marked out into twenty farms, which accounts for the term "vingtaine," still in use. But instead of 240 there are now about 1,000 farms, or perhaps more, the total rural population numbering 500 families. As the grain-crop seldom exceeds 300,000 bushels, it is always necessary to import some, while the exports usually consist of 100,000 bushels of potatoes, 140,000 bushels of apples and other fruit, 60,000 gallons of cider, and 250,000 lbs. of butter. The natives have such a high opinion of their breed of cattle, that any cows imported must be killed within ten days. Nevertheless, these Jersey cows have a sorry appearance, placed beside our Durham short-horns. There is at present some demand for them from the United States, and I saw a man shipping a dozen for New York, for which he told me that he received only £11 per head, but it is true they were not full-grown. The number of horses has declined one-third in ten years, which is probably a result of the increased area under kitchen-gardens.

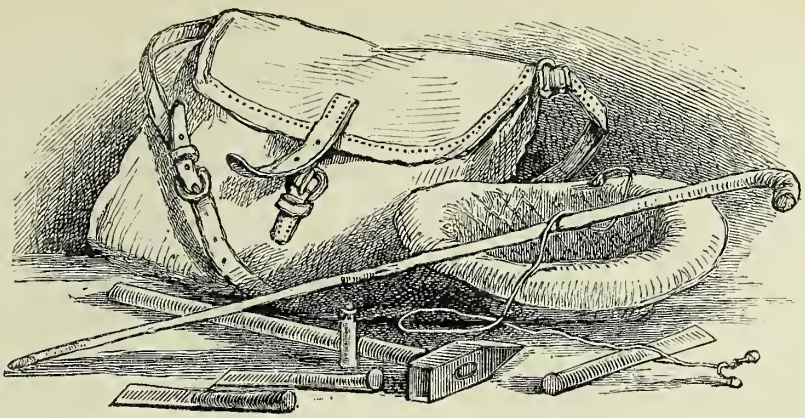
There are no paupers or "workhouses" in the island, nor any sign of drunkenness, idleness, improvidence, or misery. The inhabitants are well-fed, well-clad, well-housed, reminding the traveller of the aspect and condition of the French colonists in Algeria. Not even in England can you find a better system of high-roads ; these date from the time of General Don, who was Governor in 1810, and constructed the three "grandes routes," from which the "chemins vicinales" branch off in all directions. The maintenance of the highways forms as prominent an item in the budget of Jersey as the cost of a standing army in any of the great nations of Europe. Thus all kinds of market-produce can be promptly forwarded to St. Heliers for shipment to England ; and this at once suggests the idea that we could raise apples and potatoes as well in Kent, Surrey, or Sussex as they do in the Channel Islands.

It is the custom to praise the scenery of Jersey, and possibly an untravelled Londoner might find much to admire, but the case is different if your eye has grown familiar with the snow-peaks of the Andes, if you have wandered for months through Brazilian forests, if you have explored the lovely valleys of Mount Atlas, or gazed upon every point of beauty, from Paraguay to the Pyramids. Therefore I can only say that some of the green lanes are very pretty, and that Mont Orgueil is a noble ruin—the most interesting object in the island. From its ivy-covered battlements you can see the tower of Coutances Cathedral, in Normandy ; and if you desire to evoke historical reminiscences, you have but to summon the steel-clad warriors who paid fealty to King John at the gate of the castle, or the chivalrous De Carteret, who refused to yield up this stronghold unless to his lawful sovereign, when every town and fortress in Great Britain had surrendered to Cromwell.

If time permitted, I should have liked to visit the other islands, but they do not seem to progress like Jersey. In fact, Alderney has declined one-third in population since 1860, and Guernsey is stationary in many respects, although its grapes are deservedly coming into more repute. Alderney is so small (barely 2,000 acres) that the cows are being transferred to the Isle of Wight, where numerous dairy-farms are now being established, to supply the London market. Sark has 500 inhabitants, who are considered very skilful boatmen, and Herm counts fifteen families. There are still two smaller islands, Brechou and Jethou, about forty acres area, which are each inhabited by a single family.

Although the products of the Channel Islands increase every year, the population shows a tendency to diminish, as the people are so much over-crowded. The excess of females is 25 per cent., according to the last census, or six times greater than the average in Europe, which is doubtless caused by the number of Jerseymen engaged in seafaring all over the globe. For many years, also, a good number of emigrants from these islands have settled in Brazil and the River Plate Republics as ship-chandlers and outfitters, accumulating large fortunes by their toil and thrift. Jerseymen were, moreover, the first colonists of the Falkland Islands, when annexed to Great Britain in 1832, and to them is due the great business of sheep-farming, now so prosperous in that colony. In fine, Jerseymen are wonderfully successful, at home or abroad, and the actual condition of the Channel Islands may afford much food for reflection by political economists.

M. G. MULHALL, F.S.S.



HOW TO BEGIN THE STUDY OF GEOLOGY.



THERE are two ways of commencing to learn any of the natural history sciences, of which the study of rocks and fossils is one, or rather several combined. The first is to buy a text-book, and begin at the first page, following the teacher step by step, and from time to time examining in a museum the specimens described or figured in the pages of the volume. If the young student live in a large city he may follow out this method, or if he seek the aid of a teacher he will undoubtedly be compelled to adopt the routine indicated. And in its way it is not unadvisable. But it has just this drawback: that very frequently the learner is discouraged at the beginning by hearing of objects and of phenomena which he cannot by any possibility see; while, if he live in the country, or in a small town, he may read about scores of fossils, rocks, and minerals which he may never have the remotest chance of seeing. Of course, I do not take into account the very probable contingency of the youthful tyro, after the first flush of enthusiasm is over, contenting himself with looking simply at the pictures, and not taking the trouble of going to examine their prototypes in the cabinets of the public or private collections to which he has access. Nothing is more common than for an examiner to find a "student" describing with surprising glibness some object on paper, and then staring in dumb despair when the specimen itself is put before him. Such an individual will never become a geologist, for it is evident he does not possess the necessary enthusiasm, nor is endowed with that genius which "consists in the capacity for taking pains." We may, therefore, at once put him out of the field, in discussing how best to begin learning of what the ground we tread on is made.

The other method, though not commended to those who have to face an examination, is the better, the more frequent, and the natural way. In brief, without any serious intention of ever going very far, one often begins to be a geologist before he hardly knows the meaning of the term. The student who starts under the docile guidance of a text-book, be it Lyell, Page, Bonney, Skertchley, Davies, Geikie, Jukes, Green, or any of the numerous others—which, it makes really very little difference—goes through a regularly graduated course of lessons. He is taught, first of all, that geology is "derived from two Greek words signifying the earth, and a discourse;" and, this awe-inspiring bit of etymology mastered, that its scope is so-and-so—information not at all calculated to animate the timorous adventurer into a new intellectual world. The later chapters will initiate him into the classification of rocks—the figure of the earth—the theories as to its primitive condition and its internal fluidity. Stratified and unstratified beds will, or ought to, become familiar to him; while "faults," "dykes," "dip," "strike," "cleavage," "foliation," "synclinals" and "anticlinals," "conformability" and "unconformability," will all assert their right to be understood. Before he is permitted to know anything about the rocks themselves, he will be shown in an off-hand patronising way how they were made. Denudation, and all the forces at work illustrative of geological change, including metamorphism, allotropism, and isomorphism, will be discussed in many chapters or lectures, before he even puts his foot on the lowest rung of the geological ladder which begins with the Laurentian

Rocks of the Palæozoic Epoch, and ends with the surface deposits of the Quaternian period, or that in which we ourselves are living. Now undoubtedly, if the beginner survive this programme, he will have run the chance of imbibing a very large amount of cut-and-dried knowledge at second hand; and if he have, in addition, taken care not only to read about these things but also to have seen them and handled them, and, if possible, dug some of the objects out for himself, he will be a better-informed and presumably a more useful member of society by the time he finishes the volume than when he bought it.

But for one person who has the resolution to undergo this course of intellectual treatment, or not to break down before he is half-way through it, there are scores who know a great deal about rocks before—as was the case with a man afterwards eminent in the science—knowing that there are books describing all that he has laboriously, if crudely, found out for himself. A railway is being made in his neighbourhood, and in examining one of the cuttings his curiosity is excited by the alternations of the beds of rock laid bare—coal, dark slaty-looking layers of shale, sandstone, and limestone. He picks up bits of the refuse, and finds impressed on the rocks the loveliest sculptured ferns, the glistening agate-like scales of what are undoubtedly armoured fishes, or the broken stems of the stalked starfishes of former days, known as encrinites. He is anxious to know more about them, and very soon finds his way into a bookseller's shop, which ends in his buying a text-book.

He eagerly searches for the required information—at first like a man groping in the dark—or, rather, like a person listening to a strange tongue of which he has only acquired a few words. But the book puts him in the way of still more information, and teaches him to look for things which his untrained eye would have passed over. He returns to his cutting, and examines everything with fresh interest, and soon he begins examining, and perhaps roughly sketching what he sees in the note-book which should be the inseparable companion of every one who would gain accurate knowledge, or practise himself in the art of observing narrowly. In the course of the day he will learn much about bedding—he will notice that some of the rocks which he has seen in the quarry or cutting are tilted up, or even bent, or so disturbed by some agent acting on them from below, that they lie to each other like the two sides of a sloping roof; or, he may notice that through the centre of the beds there shoots a spur of some darker and harder rock without any trace of bedding, which has evidently once been molten, and has indurated or altered the softer bedded rock on either side of it. All this he jots down in his note-book, and he transfers to his bag specimens of each of the rocks. On his way home he will doubtless puzzle out for himself much of what he has seen, and the more he tries to do so the better it will be, as a mental gymnastic, and for his future progress in the science. Of course, on referring his conjectures to some one able to solve them, or going to his book to see what he can learn about them, he will find that in many cases he has been entirely wrong—though it does not always follow that the *litera scripta* are correct, for geology is a progressive science. However, for the present, the tyro may safely follow the words of his book with implicit confidence. Before he takes his next excursion, he will find that without knowing it he has learned, in a manner he will never forget, a great deal about "stratification" and "stratified rocks," about "plutonic" and "eruptive" rocks, "trap," "metamorphosis," "synclinal" and "anticlinal," "dip," "strike," and perhaps "foliation," and "faults." And here, at once, let me say that the student, so far from being frightened by what at first looked like hard words, will speedily be almost too fond of using them; for he will discover that they are easier to remember than the cumbrous English equivalents, and that in precision, euphony, and "handiness," they meet all the purposes for which they were devised. The learner will also find that he has to deal with many objects which have no "common name," for the simple reason that they never struck the eye of those who use common words. Our ordinary vocabulary was devised to express ideas or to describe facts and objects with which we daily come in contact, but when we begin to deal with science we meet with principles and appearances for which we require to devise new words, just as when the traveller goes into a new country he does not apply to the rivers, mountains, and lakes he finds the same names that were appropriated to those in the land which he left.

Thus, the beginner having acquired these facts finds the acquisition of others greatly simplified, and though the case-hardened writers of books may scorn the suggestion of such ignorance, is animated with a personal interest in the new science, as he daily learns that he can discover in the great book of the earth what he hitherto half believed was only confined to the pages of the printed ones on his shelves at home. Take another case: if the young student live in the north, he will not long have learned to spell out first lessons in the reading-book of the rock before he notices on the surface of some hard, exposed knoll, most probably of whinstone, a number of longitudinal or confused grooves or scratches. These he will most likely find repeated on many other rocks in the same district, and most generally following a certain determinate plan. Working out the problem for himself, he may be long before he strikes on anything like the real explanation. But when he finally refers to his books for information, and finds that ancient ice passing over these rocks, or icebergs depositing the great scattered or "perched blocks" of stone, entirely different from any in the immediate neighbourhood, have been the cause of these scratches, he will be in a better position to understand the soundness of the theory, and able to read with an interest and intelligence the account of the "glacial period," and the "glacial deposits" with their arctic shells, which will naturally form the next part of his geological study at home. Such examples

of how the beginner may gradually obtain an elementary knowledge of the geology of his own neighbourhood, and of the general principles of the science, might be multiplied to any extent, but these instances may suffice as samples. In short, there is not a rock, a quarry, a sand-pit, a sinking for a coal-pit or a well, a railway cutting, a sea-cliff, a mountain glen, a river-bed, a wall, the stone of a house, the "metal" for the road, the gravel of the garden walk, or the endless strange fossils, with their strange history, which might not, to the intelligent and moderately persevering student, convey such lessons in the science as those which Canon Kingsley has so charmingly told in his "Town Geology." The great thing is, to use a familiar phrase, not to "put the cart before the horse." Don't be able to talk fluently of what you have only read about. Always try to see the object itself, and go gradually from the familiar to the less familiar, until you are brought up—we shall not say standing, but modestly diffident before the unknown. Throw nothing aside until everything knowable about it is known, and never be sparing of your legs, for if you gain little knowledge by a long walk, you have at least fortified your body while endeavouring to strengthen your mind. Above all, as Charles Dickens used to impress on his younger literary brethren, "don't be condescending," for you will find that, after all, the meanest bit of rock, the most seemingly insignificant sea-worn pebble, embodies within or upon it problems, the solution of which requires sager heads and more learning than even that of the most persevering beginner in geological science.

Patience is requisite, and it is also well not to be too ambitious. First let the beginner know his own neighbourhood thoroughly, and then he will find that the acquaintance of another comes to him very easily; just as the traveller who makes himself familiar with one province of an empire, finds that he sooner masters the peculiarities of the others than if he had visited them with only a smattering knowledge of any part of the country. To attain the local knowledge is now much less difficult than it once was. Not only are good geological text-books far more plentiful than publishers desire, but the researches of local geologists, and above all of the officers of the Government Geological Survey, have provided excellent maps and descriptions of nearly every part of the kingdom. The beginner ought early in his studies to provide himself with the sheet and accompanying "memoir" relating to his district, and after he has once become fairly familiar with the language of the science, to try and follow out all the facts mentioned in it. The works of the local geologist will of course be easily ascertained on the spot, and the local bookseller can, no doubt, also obtain the publications of the Geological Survey, which, it may be added, though not expensive, are somewhat dear. If, however, there is any difficulty, the agent in London (Stanford, Charing Cross) can supply them. On the map the limits of each "formation" will be shown by colours, and "sections," or more or less problematical cuttings across country will also be engraved on it. The student should, first of all, by examining the "out-crop" of rocks at the surface, and availing himself of the glimpses which quarries, sea-cliffs, railway cuttings, river-banks, borings, and such like under-the-surface peeps afford, make a "section" for himself, and then test the exactitude of it by comparing it with that on the Survey map. To collect is intuitive to mankind, and accordingly it is needless to counsel the student about collecting, or how best to form a museum, as his text-book will doubtless contain sufficient hints to start him into this department of his new hobby. A cabinet, which may be a press or a box with shelves, is always much too soon filled, but it is also easy enough to throw or give away the bad specimens as better ones are found, and so long as it is not filled simply by purchases, or by specimens about which the learner does not trouble himself to learn anything, the collecting mania is a valuable and even an indispensable adjunct to the course of study which has been all too briefly sketched out. It ought perhaps to be added that, while abjuring the silver hammer and chisel, an exception must be made in favour of one of the little typical collections of rocks, fossils, and minerals which are sold by dealers whose names can be found in the advertisement pages of the scientific journals. To a student at a distance from a museum these are especially valuable, and are indeed essential if an accurate knowledge of minerals is to be acquired. The only danger of such a collection is that the student, having once learned this easy way of making a museum, is apt to travel the royal road much too frequently. The "philosophical instrument makers" have devised endless more or less useless apparatus, which will soon enough be brought to the beginner's notice; but, at first, a text-book, a hammer, a chisel, a stout bag, and perhaps, in addition to a note-book and pencil, a little bottle of acid, to determine whether a rock has lime in it or not, are all that is necessary; while the beginner who has an earnest desire to learn, is gifted with a fair intellect and a reasonably stout resolution, and is not afflicted with more than the average laziness of the species, may be certain before many months have passed to have acquired a large amount of geological knowledge, and experienced a corresponding degree of the loftiest enjoyment.





CHIT-CHAT ON DRESS.

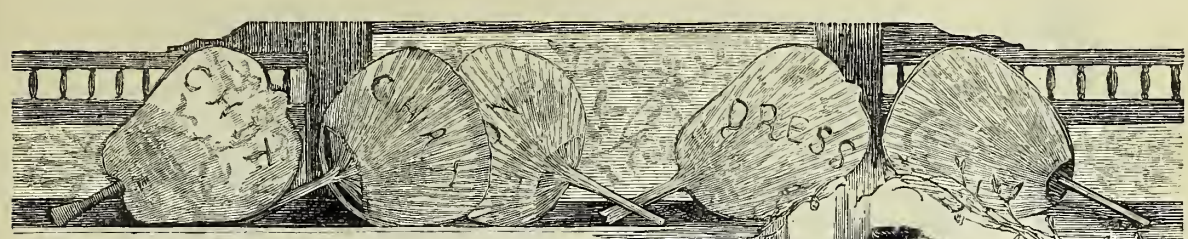
BY OUR PARIS CORRESPONDENT.

SPRING is approaching tardily, but the shops are nevertheless busy with their preparations, and we are beginning to learn what is likely to be worn when warmth and sunshine are once more with us. Neutral-tinted woollen goods are best for spring wear, and English materials are considerably lowered in price. Fancy beiges, striped wool beiges, and armure melange beige are all to be bought in the best London shops for less than eighteen-pence a yard. There is a novelty in the stripes, which are darker than the rest of the material and shaded. Manufacturers have a very apparent difficulty in discovering novelties, and they ring the changes in the matter of design on stripes and sprigs and fancy weaving. Strasburg cloth illustrates the last-named, for it resembles corduroy, without the plushed surface. A new tweed is called "Drap de Coblentz," and is sold in prunes and grenats, as well as in drabs and browns and greys. The newest shade of all is a terra-cotta brown, of which there are several varieties, shading from brown to red, and quite original. Cream has been brought out in a darker tone, and reds from claret to cardinal promise to be as fashionable during our summer, if we have any, as last season.

But to return to the new materials. I would warmly recommend to those who want a durable fabric, which drapes well, the somewhat novel casimir, also foulé cloths, both soft in texture, and intended to be made up alone, with no admixture of materials. I hear on all sides that the best dressmakers will this year make short costumes, at all events of one stuff only, and that the most elegant dresses for walking and visiting are to be made in satin merveilleux, which recalls the satinettes of fifty years ago, only by no means so good; very soft, very silky, and made in admirable colourings—browns of the rich snuff-red, peacock, petunia, seal-brown, and other very useful hues.

Stockingnette, Jersey cloth, and all the long list of materials which yield to the figure, have suggested the new Cotelette, which with the same stocking-woven surface yet does not stretch. Bagnouse is plain like llama, only firmer and a decided improvement on it. The fancy Bagnouse has an Oriental stripe in coloured silk, woven in loosely; indeed, in fancy goods the materials are all more loosely woven.

I fear that no Frenchwoman would allow that English taste is improving, though the English people originate many styles and fashions instead of going to France for them. One of the English modes is the



introduction of loose tinsel threads as stripes and squares on woollen goods. They are tawdry to look at and wear badly, the tinsel rubbing off. All dresses of fancy materials are this year sold with borderings to match, which are intended to be used for trimmings, and many dresses in silk, wool, and cotton have been prepared with the old-fashioned bordered flounces, which readers of middle age will remember as worn in their youth.

Many of the new stripes are of the herring-bone character, and a feature in the stuff dresses is an interweaving of tiny silk thread dots all over the material. None of these stuffs, in my opinion, equals the good French Beige Rayé, or the Drap d'Ostende, which is very close-woven and always in plain self-tints. Made up with the simple good taste of a Frenchwoman, and only a few looped bows of ribbon here and there, they make the best of travelling and useful costumes.

The cotton dresses continue to be characterised by great beauty of design. The patterns are borrowed largely from Japan, and cover the fabrics well. They are either floral or geometric, the colours closely blended, the contrasts in no case glaring. Here and there, for fête dresses, Pompadour sprigs in light colours will make most charming costumes, and they are sold with parasols and other accessories to match. All these dresses will be made short, the figured mingled with plain self-colours, and much betrimmed with lace; indeed, they are so dressy-looking as on many full-dress occasions to take the place of silk.

Bridesmaids' dresses generally present difficulties. At the present moment, grenat or ruby dresses and cream skirts are the most popular, plush or velvet being the favourite material in the grenat and ruby, and in nine cases out of ten a muff hangs at the side, made of the same mixture. Occasionally the routine is reversed: the jackets, or rather coat-bodices, are cream, the skirts red; and at a large and fashionable wedding recently, half the number of bridesmaids wore red skirts, half peacock. It is not at all necessary now that the whole bevy should be dressed alike. Sometimes they are totally dissimilar. Occasionally each two wear different colours. Cream trimmed with gold lace forms a charming mixture. Sometimes an attempt is made to revive old styles, and among the most successful of late were some dresses of satin and Spanish lace, with high collars and Mary Stuart caps and veils. Frequently now the first bridesmaid dresses quite differently from the others—in cream, while the rest are in colours, and so on. Peacock in rich brocaded velvet has found favour for bridesmaids' dresses during the winter, but is too heavy for the spring. Sapphire-





FIG. 1.

blue satin merveilleux, trimmed with plush, is certainly prettier; and Gainsboro' hats are universally worn for bridesmaids. There existed formerly a prejudice against green, but that seems to be quite overcome, and myrtle-green is often worn; and now-a-days you see black satins and velvets at every wedding, which would never have been heard of some years since. Bronze and old gold, salmon-pink and ruby—these are both favourite mixtures. Baskets of flowers replace bouquets, and the bridegroom presents the bridesmaids with everything, from fans, bangles, brooches, to bracelets, photo-books, or jewelled bouquet-holders.

Women are beginning to turn their attention far more than ever to the art of dressmaking, and in London many facilities are offered to them. There are several good establishments where practical instruction is given in fitting and taking patterns, and at the Ladies' Dressmaking Association in Somerset Street, Portman Square, the whole mystery is taught from the simplest beginnings to the end of the chapter, viz., the final trimmings. A winter or so ago, an association of ladies anxious to promote the welfare of those less fortunate than themselves, had a teacher over from Germany who gave lessons in various parts of the metropolis, but the good intentions failed unaccountably. The Dressmaking Association is, however, more fortunate, and musters a goodly throng of learners. The instructions combine embroidery, and a vast quantity of very admirable work has been wrought by the pupils—embroideries in silk and satin which few of the shops could have produced. This winter several unknown furs have come to the fore, and are pleasant wear in the March winds—for instance, Kolensky, from an animal of that name found in North America. It is used for muffs and trimmings, but being of a dull tawny yellow naturally, it is tipped, *i.e.*, the long hairs are dyed or painted dark brown, to represent beaver. It has often taken the place of opossum and natural racoon, the latter by far the most durable of the three. Nutria is another unfamiliar fur, and is the skin of the Caypore, a South Australian animal, and is often called Nutria beaver. Its chief use is for gloves and jackets, and it is dyed brown.



FIG. 2.

Curious mixtures prevail in dress. I saw the other day a jabot of fur covered entirely with flowers, for ladies of fashion affect the wearing of flowers greatly just now, especially those that cost a good sum of money. A long wreath of closely-set hyacinth, camellias, &c., is frequently worn on the bodice, from the throat to the edge of the jacket.

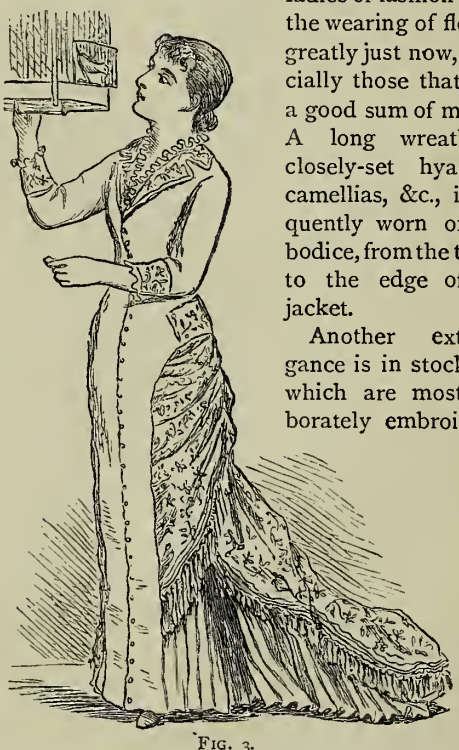


FIG. 3.

Another extravagance is in stockings, which are most elaborately embroidered or open-worked; plain colours only are worn. Fur-edged boots have been adopted not only by skaters, but by country walkers, and the warmth produced about the ankle makes the foot considerably warmer too.

A word, however, with regard to the putting away of fur articles. Boxes lined with zinc and made of camphor-wood are the best receptacles, but these do not come within the reach of every one. Those who are not so favoured should pack away everything they can in large boxes lined with a linen sheet, and well covered with Persian moth powder and powdered camphor; also on the tops of the furs or woollen goods, when packed in, another sprinkling of the same compounds, folding the sheet well over, and fastening the box securely, so that no air can get to them. It is well to remember that the eggs are laid in May and June, and that they are hatched in fifteen days, when the moths at once begin their depredations. Nothing should be put away without being thoroughly dusted. Furs

should be beaten with a small whip and hung in the air till all fear of moth-eggs is over. The fumes of tobacco or sulphur will kill the moth even when it has made some way into the material. Almost any strongly-smelling substance will keep moths away. Pepper, camphor, carbolic acid, arsenic, or alum will poison the larvæ. Care is necessary that nothing be put away damp, as damp breeds moths readily, and there are few things more destructive. Clothes well cared for last just twice as long, and look well to the end. Now, however, is the time to begin to think of new ones, for the spring sunshine shows up all defects.

The illustration at the opening of this chapter gives two promenade costumes suitable for early spring wear. The lady who is making purchases has donned a new costume of the novel casimir in terra-cotta red; but foulé cloth, or "Drap de Coblentz," may be substituted for casimir, if a thicker material be required. The jacket bodice forms slight paniers on the hips. The fringe that edges the draperies on the skirt is chenille of two shades of terra-cotta red, and the bows corresponding in colour may be either satin or velvet. The Mother Hubbard bonnet is brown satin, with a gay bird at the side; the wide strings are tied with loops only, no ends being visible.

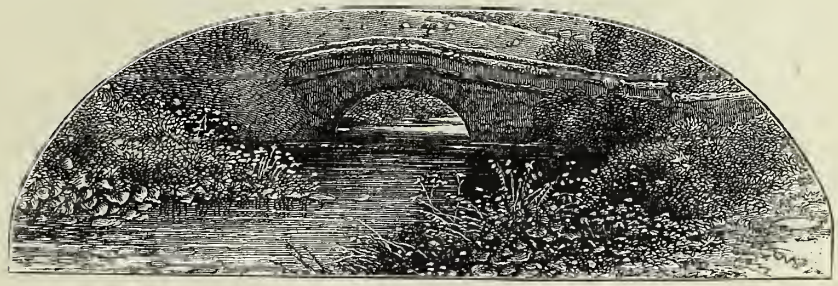
The lady who is posting a letter wears a demi-saison mantle in brown broché satin, trimmed with feather bordering in a lighter shade of the same colour; the cord and tassels are light brown chenille. The bonnet is broché satin; the strings and feathers should match the dress beneath the mantle. This is a carriage or visiting toilette, as the train is demi-long.

In the second group there are two sisters, likewise in out-door apparel. The elder one wears a costume of the new dark blue Cotelette, trimmed with plaid surah, the colours of the checked pattern being red and pale blue. This surah is used for collarette, bordering to the jacket, and for flounce on the under-skirt. The balayeuse is red foulard; the hat is dark blue velvet, with pale blue shaded feathers, and a small red wing in front. The younger sister's costume is in natural-coloured beige cloth, with cardinal plush crossway bands; the silk stockings match the plush, and cardinal red appears again in the Granny bonnet and sash. The seated figure below the sisters is in a dark green satin merveilleux Princesse robe with gold trimmings. The hat-shaped bonnet, also velvet, has a gold-bordered brim and a shaded feather, the latter the colour of the Gloire de Dijon rose.

Lastly, there are three figures in outline drawing, illustrating in-door toilettes. The young lady with a vase of flowers in her hand (Fig. 2) wears a dress of Bagnouse with woven chessboard bordering. The plastron is satin merveilleux gathered at regular intervals, and plaited satin is also introduced alternately with Bagnouse for the skirt.

The figure contemplating a picture through her eye-glass (Fig. 1) wears a dress of broché and plain material, the broché fichu being edged with deep chenille fringe. The bodice is pointed back and front, and in the short skirt the two fabrics are skilfully combined.

The figure feeding her bird (Fig. 3) wears a stately demi-long dress of plain satin merveilleux and broché satin, the latter being used for revers, pockets, cuffs, and train. The fringe round the train is chenille. These youthful wearers adopt the fashion of short curly hair, eminently becoming to fresh young faces. It will be seen that the new materials described in the early portion of this chat are all utilised in making the dresses here illustrated.



ON WARMTH AND SUNSHINE AND LIGHT.

BY A FAMILY DOCTOR.

MY friend Griggs is somewhere on the other side of sixty. He does not mind that a bit. He would not even be angry if you called him an old fogey; but there is so very little fog about the man that if you did make any such remark, you would be bound to feel ashamed of yourself almost as soon as you had spoken. Griggs is a beautiful and well-preserved specimen of the class of men who while enjoying the good things of this world as they should be enjoyed, nevertheless lead regular lives, and do not take nor require medicine of any kind more than about once in sixteen years, and who, being healthy, have not the slightest wish to live for ever in the world. Indeed, I believe that getting old to such men as Griggs is rather a pleasant sensation than otherwise; life's busy, bustling day is near its close, the sun is setting pleasantly enough with promise of a bright to-morrow, and they—why, they are nearing their rest. I do not see many signs of

age about friend Griggs, however: he scores at cricket where he used to bowl, and he is not so supple on the ice as he once was; he calls fellows of forty "you youngsters," and prefixes any amount of stories with "When I was a young man;" but Griggs is as hard as steel for all that, and so may my reader be when he reaches sixty. It seems, if we are to believe Griggs, that everything is changed since he was a boy; and "everything" includes the weather. There are no real cold winters now, he will tell you, but surely my frost-numbed fingers attest to the contrary, for hardly can they clutch the quill, and if I hold them to the fire I shall have digital paralysis, with a lively hope of subsequent chilblains. No old-fashioned winters—and yet the window-panes frozen into lacework, and half an inch of ice on the morning tub! No real winter—and the snow—but there! I'll desist, for this is an article on warmth and light, and not on cold; but here is something which I must mention, something from which the youngest of us may learn a lesson. In October last, winter came down upon us like a thunderclap; only the week before its arrival we were wondering at the brightness and clemency of the weather, or complaining of the noon-day heat; then we awoke one morning, and as soon as we peeped from behind the blinds, we drew back, rubbed our eyes, and then looked again. Yes, there was no mistake about it, the ground was white with snow, and the flakes fell thick and fast. A change had come o'er the spirit of the scene, and summer was dead: a change, and so *sudden* a change, too. The latest flowers in the garden, that thought they were going to bloom for ever, bent their heads and died; birds that only a day previously had been singing in the gladsome sunshine suddenly became mute; the swallows fled, and the lapwings too; and here I tell you of a stranger thing that happened in one of the best-wooded counties in England—Berkshire to wit. Everybody knows and admires the sturdy English oak; its very name seems associated with strength and longevity, and yet hundreds of those "green-robed senators of mighty woods" stand at the present moment mutilated, dying, or dead, silent witnesses to the power for evil that lies in a sudden change from warmth to cold. The leaves had not fallen when the snow came on, the acorns clung in thousands to every tree, and thus, laden with leaves and fruit, brittle with frost, and borne down by the weight of the snow, the top branches snapped, fell on those beneath, which in their turn broke and fell, till the tree became a wreck. The moral is this: sudden changes of temperature, whether from warmth to cold or *vice versâ*, are inimical to life, even to the life of the sturdy oak.

Now, to all warm-blooded animals the total absence of heat and light means the cessation of the power to exist, and so long as we can maintain our bodies at an equable temperature, so long do we enjoy perfect health, and not for a minute longer. That is my text to-day, and I will now try to enlarge upon it in a way that may prove of use to those who believe in the proverb, "Forewarned—forearmed."

There is no animal in the world, that I know of, born into the world in a state of greater helplessness than the human infant, and none more dependent upon artificial means to keep up the animal heat. It is not actually born blind, like a dog or cat; at all events, a child's eyes are open from birth, although I doubt much that they are of any intrinsic use to him, for the first month at least; but the human baby would very, *very* soon succumb to the cold if not protected. This is proved by the fact that a very much larger proportion of children die during the winter than during the summer months, although as regards the mortality of the young and the middle-aged there is very little difference between those seasons. The older a child gets, the better it becomes able to resist cold, but—and I would that mothers would bear this well in mind—not until a boy or girl is well into his or her teens should fostering warmth be looked upon otherwise than as a friend, or cold otherwise than as a deadly foe. Children in the cradle are seldom or never neglected by parents among the middle or upper classes, but it is when a child begins to run about, and is able to go out of doors, that mistakes are made about the clothing, which often lead to speedily fatal illnesses, or sow the seeds of future ailments, which render life a misery and a burden, that can be only laid down at the portals of the tomb. Instead of studying warmth and comfort in the clothing of their children, thousands—nay, millions of mothers study only fashion. I speak advisedly, for I have proof of what I aver every day of my life.

It is not my province to tell my lady readers how to cut the patterns for their children's dresses, or even to choose the material from which to make them; but as a medical man it is my duty to remind them that the child who is clothed sufficiently warmly, and clothed cleanly and neatly, is far better dressed than one whose dress shows it to be a victim to a votaress of fashion. The one has a chance of turning out a healthy man and a useful member of society, the other has not.

Old people are apt to complain of their blood running cold in their veins; they, like children, have a difficulty in maintaining the animal heat, and presently I shall have a word of comfort to whisper to them, which they may do well to listen to.

Meanwhile regarding the young—those who are between the ages of ten and twenty—I have to say that, with no desire to advise them to be overclothed, and thus made hot-house plants of, too much attention cannot be paid to keeping them warmly clad. Cold is *so* fatal to the young, warmth is life itself; cold retards the building-up of the tissues of bone and muscle, warmth encourages it; cold interferes with the due performance of the functions of the skin, throws extra work on the liver and kidneys, and blunts the nervous energy of the brain itself; warmth has altogether a contrary effect.

Some parents labour under the erroneous impression that they are making their children hardy by allowing them to expose themselves to the deleterious effects of the absence of warmth. To maintain the animal heat in the young it is not necessary that

the clothing should be heaped upon them, nor that they be carefully made prisoners of in-doors, whenever the day is chill or winds blow high. The clothing should be light rather than heavy—light and protective; and material should be studied, not the amount.

Not only young people but middle-aged as well, to say nothing of those who are old and full of years, should wear some kind of flannel underclothing all the year round; though if I must make an exception of the former, let me advise them that flannel be worn in winter and silk in summer; and this I mean to refer also to a change, in hot weather, from stockings or socks of wool to those made of the softer and thinner, but none the less comfortable material, silk. Those who suffer from cold feet should wear two pairs of *light* soft socks. Old people should always have their feet thus clothed, for their hearts are not so strong as they were in bygone days, and cannot pump the warm blood to the extremities with the force they were wont to. Few things are more destructive to, or rather I should say, few things tend more to waste the animal heat than cold feet and cold hands. The old among us should protect both, not forgetting that the spring and winter months are particularly fatal to those advanced in life.

The aged ought to wear a flannel rather than a cotton night-dress; it should be of sufficient length, too, to cover the limbs, and bed-socks should also be worn; these should be of the lightest, softest wool that can be procured. They should have a sufficient quantity of bed-clothes and no more, each blanket being light and soft; but heavy counterpanes should never be slept under, for the weight of them makes sleep fatiguing, instead of refreshing as it ought to be.

The best temperature at which to keep a room for health's sake is about 69° or 70° above the mantelpiece. Less than this is far more agreeable to many, and a greater degree of heat is unwholesome, to say nothing of the danger of catching a chill on going out from a room so heated. Elderly people should never put on a cold and unaired great-coat, before going out of doors in winter; it takes but a few moments to warm, so there is no need to run any risk. It does no harm either to warm both fingers and toes before going out; then if a brisk walk be taken there is little fear of any sudden or dangerous lowering of the animal heat. Walking can be done with greater ease and comfort if the clothes be light; and it is a very easy thing to have them made of materials that are both light and warm. The chest in people advanced in years needs all the protection you can give it; and here I tell you something worth remembering: the back requires protection from the cold as much, if not more than the breast, and yet protectors are nearly always worn on the chest only—a mistake that is fatal to thousands. The custom of taking cordials, generally of a vinous nature, to keep up the animal heat, is a very bad one. Never take a cordial of any kind if you can really do without it. If one be very weakly in constitution, he should consult a medical man on the subject, and do exactly as he advises.

There is no light like the light of day; the lower animals seem to know this, and make it their maxim to go early to bed, and be astir with the dawn. We human beings, however, must have artificial light of some kind; though we should never forget that candles, lamps, and gas, all consume our precious oxygen, and produce poisonous carbonic acid gas; and the larger the burner, the greater the amount of oxygen consumed, and the more the need for perfect ventilation. Even 4 per cent. of carbonic acid gas in a bed-room is injurious to health and dangerous to life, therefore I warn my readers against the too common habit of burning lights all night. For many reasons, too numerous here to specify, sleeping in the dark is more refreshing than in a glare of light, whether natural or artificial.

Sunshine is necessary for the health of all animal and vegetable life. No, I will not even except the mushroom, for I am convinced that those delicious and succulent agarics that are gathered in the open fields are better-flavoured, and more nutritious, than the edible fungi that are forced by artificial heat in the darkness of a cellar.

The benefits derived from exposure to the rays of the sun were well known to the ancient Romans, who used to have terraces on the southern sides of their domiciles, called *solaria*, on which to walk or seat themselves, to enjoy the blessings of fresh air and sunshine combined. Physicians of the present day are likewise fully alive to the regenerating effects of sunshine in many cases of illness, notably perhaps in consumption. In the incipient stage of this terribly fatal disease, a long sea-voyage southwards—for example, to our distant Australian colonies, is an almost certain remedy. Even in our own fickle and changeable climate, basking in the sunshine is of immense benefit to the nervous and weakly invalid, as well as to the convalescent from some long, lingering illness. Those who have to work down underground are very seldom indeed long-lived, and they are remarkably subject to debility. That is one fact well worth bearing in mind; and here is another: barracks in which soldiers live, if built so that but little sunshine can enter, are never healthy. It has been noticed also that, in times of epidemic, houses that are freely exposed to the rays of the noonday sun stand a far greater chance of exemption from the prevalent disease than do those that are shaded. I myself recollect an instance of the cholera decimating the dwellers on the shady side of the street of a village, and sparing those who lived on that exposed to the health-giving beams of the noonday sun.

Without then actually running any risk of sunstroke, every one should endeavour to get as much sunshine as possible. Some young ladies are afraid of spoiling their complexions, but I do not think the sun does this; sun-browning is not a deadly complaint, and it is easily removed, and freckles are a sign of health. Court the sun then, winter and summer, in your rooms and out of doors, for sunshine to the young is vigour, while to the old it is life itself.

FOR MONEY—FOR LOVE.

BY THE AUTHOR OF "THE DINGY HOUSE AT KENSINGTON," "THE BRIDGE BETWEEN," "THEIR SUMMER DAY," &c. &c.



IT was just like a fairy story come to life, and I will tell you all about it, fairy-story fashion, and then you can judge for yourselves. Once upon a time, but not long ago, there were two sisters living with their grandmama and their maiden aunt down at Chislehurst. The one was called Mary, and the other was called Etta, and they were both very pretty and so on. Mary was quiet and sympathetic, and always did all she could to help every one, and was rather put upon in consequence, but didn't know it, and would not have minded if she had. Etta was very lively and thoughtless, and had a way of getting other people to do all manner of things which she ought to have done herself; and she used to long for fine dresses and pretty trinkets, and all the pomps and vanities of this wicked world. And the young men who went to the house to talk to the grandmother, and from admiration of the maiden aunt, used to like Etta better than Mary, for they thought there was more "go" in her, and never realised that there was also much less heart. And among the young men who went, there was one who had been in the habit of going from his youth up. His name was Wilfred Martin, but for some unknown reason, and probably because his name was not William, he was always called Will. He was a very nice young man and very handsome, but unfortunately he had only one hundred and twenty pounds a year, which was the magnificent salary paid to him by the firm of engineers that employed him as a clerk. Now of course he was head and ears in love with Etta, and always had been; and she really liked him pretty well, though she snubbed him sometimes; and he was quite determined to marry no one else, and one day he took her for a walk and told her so; and she, being in rather a sentimental humour, let him talk.

"We don't want to be rich," the foolish young man said; "it doesn't mean happiness, you know, dear Etta;" and she said, "No;" but she thought, "It does mean fine clothes, and I should look remarkably well in them;" and then he went on: "You know you two girls are so clever; I was thinking how nice Mary looked yesterday; and I thought how pretty you would look making up a simple cotton for your own self to wear;" and she said, "Yes," and thought, "Catch me at it if I can help it; I should like to wear beautiful silk and have a fashionable dressmaker to make it;" and then Will went on and on, and told her how he loved her, and how he'd do anything in the world for her if she'd marry him; and she, reflecting that there wasn't any one else in the way, and that it was rather nice to have a good-looking young man by your side protesting that life wouldn't be worth having without you, turned down her eyes, and whispered that she thought she could some day, perhaps, be happy with him, and that she didn't like any one else in the world better, or even as well.

Then they went home; and when Mary was told the news she got very pale, and said she hoped they'd be very happy. Then she went up to her room and shut the door, and cried fit to break her heart; and then she hoped that Etta would give up all her flirting ways and be good, and unselfish, and kind, and all that, for Will was the dearest fellow in the world, and deserved to marry a model of goodness.

But Etta was rather an artful little minx, and refused to let Will say a word to her grandmother or her maiden aunt about what had passed between them, and so Will had to get all the sympathy he could out of Mary, who never denied it him, but would sit for hours talking about her sister.

"Mary is the kindest girl," Will used to think, "and when we are married she shall come and stay a month." And he went without his dinner for nearly a fortnight, and only had bread and cheese, and with the money saved he bought a silver locket for Etta and a three-cornered pin-cushion for Mary.

One morning a letter in a blue envelope and directed in an ugly handwriting came for Etta, and she opened it, and when she had read it she gave a scream; and Mary said, "What *is* the matter?" and the maiden aunt told her she ought to be ashamed of herself; but Etta didn't take the least notice of them, only walked out of the room and went up-stairs and reflected for some time. Then she went into her grandmother's room and found her sitting up in bed, in a night-cap with very large frills, having her breakfast, and she exclaimed—

"Granny, Mr. Alfred Brown has made me an offer of marriage."

"An old fool!" said her grandmother. "Why, he's fifty, if he's a day."

"He's only forty-five, for he says so," Etta answered; "and he's very rich, and I shall marry him."

"And you are nineteen and ought to know better," her grandmother said, though perhaps that was the reason why she didn't.

Then Etta went down and told Mary, and Mary said she was a heartless girl and wouldn't prosper; and the maiden aunt said that Mr. Brown would soon tire of a chit like her, and ought to have married a woman of a sensible age.

And Mary said, "What are you going to do about Will?"

And Etta answered, "Jilt him," and did it with no more ado.

And Etta married Mr. Alfred Brown, and they had a very grand wedding, at which a great many speeches



"SHE MET THE POSTMAN, AND HE HANDED HER A LETTER."

"*FOR MONEY—FOR LOVE* (*p.* 251).

were made—all very dull. And then they went off to a dreary country-place for their honeymoon, and they didn't know how to pass the time away, and Etta told Mr. Brown that she felt very dull, and he wouldn't let her have any novels to read, because he said they were all trash, and Etta never could read anything else. So they went for long walks in the damp woods, and Etta caught a very bad cold in her head, and looked quite ugly. And at the end of a month they came back to town, and lived in a very big house, all done up with dadoes, and faded-looking wall-papers, and sickly-hued hangings, and full of clocks that wouldn't go, and chairs you couldn't sit upon, and tables with legs that would have been a disgrace to a spider, and all the other things that the heart of woman, in the present day, delights in. And Etta walked about in her grand dresses, and looked at all her grand rooms; but there was no one to look at her except her husband, and he soon got very grumpy. And Mr. Brown would never let her go to any parties, and never let her invite any friends to the house; and in six months' time she wished she was back with her grandmother and her maiden aunt. And though she had a grand carriage, it was a stuffy, close one, and no one could see her; moreover, the coachman used to insist upon driving in the direction of Camden Town, or the Harrow Road; and her husband said he was an invaluable servant, and the best air was to be had in those localities.

And, meanwhile, Will nearly broke his heart, and then went off to New Zealand, or somewhere else, and there he invented something or other—but I haven't the least idea what—and in five years' time he was very rich indeed, and was always thinking of Mary, and wondering how it was he hadn't fallen in love with her, for she was much the nicer girl of the two. And just before he came home, he wrote her a very long letter, and asked her to marry him; but he said nothing about the big fortune he'd made, for he thought that Mr. Alfred Brown had been married for money, but he should prefer being married for love.

Now Mary and her grandmother, and her maiden aunt, were all staying at a farm-house in the country, and one day Mary, who was looking prettier than ever, and far younger, was walking across a field with a basket full of physic and some good things which she had been to fetch for her grandmother, when she met the postman, and he handed her a letter. And when Mary opened it there was Will's offer, and he said he'd loved her for a long time, and he wondered if she would fight the world with him; and then she burst into tears, and said, "Dear Will, he's evidently still poor, and so I must love him with all my might and main, as I always have ever since I can remember." So Will appeared on the scene again, and Mary and he went for a walk in the woods, with the flowers beneath and the birds and the trees above, and so on; she told him that she'd never cared for any one else, and never would, and somehow her head found the way to his shoulder and liked it very much.

"And you don't mind being poor, my sweet, sweet, sweet darling?" he said. And she answered—

"Oh! my dear, dear, dear Will, I shall quite enjoy it."

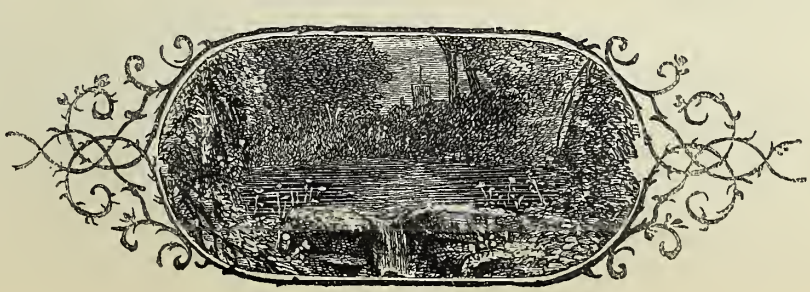
"But I shan't be able to make any settlements on you, as Mr. Brown did on Etta," he said.

"So much the better," Mary answered. "It will save a lawyer's bill, so you see it is real economy to be poor."

And he said, "So it is," and thought what a brilliant girl Mary was.

And then they went back looking very sheepish, and told the grandmother, who said, "well, she never did;" and the maiden aunt, who called Will a weathercock, and said girls were always thinking of love and marriage, and they ought to have something better to do.

And Will and Mary were married, and they had a beautiful honeymoon, and went for nice walks in woods that were quite dry, and laughed so much they didn't know what to do; and, at the end of a month, Will took her home to a beautiful house, furnished with all manner of lovely things—soft cushions, and Indian hangings, and Japanese pots, and exquisite flowers—and he liked her to give parties, and to go to them. And she wore exquisite dresses, and had a beautiful open carriage, and she used to drive about, and all the people who passed her thought how happy and pretty she looked; and sometimes she passed Etta, but she could only see the tip of her nose. And Will and Mary will live together for a great many years, and be very happy indeed; and Etta and Mr. Brown will live together for a great many years, and will have a great many quarrels, and waste a great deal of time in sulking: and the moral of this story is, that if you are engaged to a nice young man and you love him, you'd better cling to him, even if he is as poor as a church mouse; though, of course, if he should become rich it will be very nice indeed.



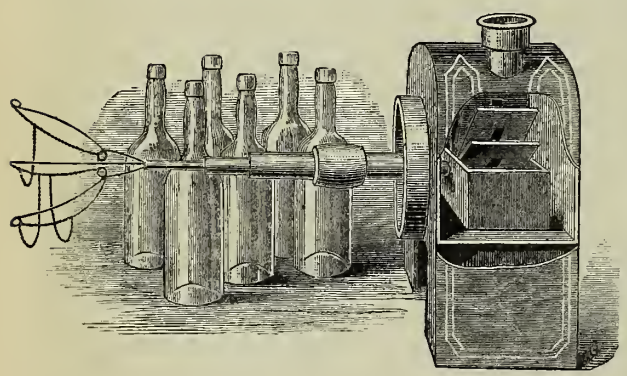
THE GATHERER.

A Frost Tell-tale.

Amateur gardeners can easily construct a frost-alarm, which will ring an electric bell when frost makes itself felt during the night in the greenhouse or conservatory. An iron wire, ten or twenty feet long, hung so that its lower end is free to contract by the cold, and in so doing complete the circuit of an electric battery in circuit with the bell, is all that is necessary, and can be readily arranged. A little more ingenuity, and the wire can be adjusted to drop a weight and strike a match, which will set fire to some light combustibles capable of defeating the rigours of the cold by the cloud of smoke which will arise.

A Machine for Washing Bottles.

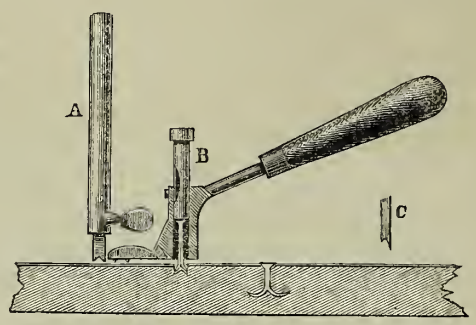
Another clever invention, of American origin, is shown in the accompanying engraving. It is a machine of a very simple character for washing bottles, tumblers, paraffin lamp chimneys, and the like. It consists of a shaft that is turned by a small water-wheel, which is driven by the force of the water as it streams from the tap. When the wheel revolves with a certain speed it shoots into the bottle wire arms, that carry some chains that are dashed against the sides of the vessel by centrifugal force. These chains not only agitate the soap and water so that the bottle



is quickly and thoroughly cleaned, but detach from the sides particles of adhering matter. A brush of convenient size may also be inserted in the bottle and worked about by the wire arms.

A Nail-Driver.

Perhaps nothing will better illustrate the inventive genius of the Americans than the appliance represented in the woodcut. It is an instrument for making a nail-hole, and for driving the nail home and clinching it when there, and is the most ingenious thing of its kind that we have seen. The part (A) of the apparatus that makes the hole has a notched end which, on being actuated by a screw, penetrates the wood and, after forming the hole, leaves a ridge in the centre at the bottom. A section of the hole made ready for the nail may be seen at C. The driving



tool, B, comprises a socket furnished with a handle, and contains a follower which rests upon the head of the nail and receives the blows of the hammer in the process of driving the nail. The nail is split for half its length, the two arms so formed being slightly separated at the point; accordingly when they meet the ridge at the bottom of the hole they are forced still further apart, clinching ultimately in the body of the wood. We should imagine that it was very difficult to extract a nail thus driven home. Whether the appliance can be made readily and cheaply available for every-day purposes we do not know, but for special work it might, we imagine, be employed with advantage.

A Mighty Lever.

A new steam-crane is nearing completion at Woolwich, which is to be the most powerful piece of mechanism in existence. It is designed to meet the necessity of raising and placing in their carriages pieces of ordnance of such enormous size as to defy all previously existing means of lifting power. Within eight pillars, by which the structure is supported, are placed the engines and other gear, and the whole travels on a circular railway of the ordinary 4 ft. 8 in. gauge with a sweep of 430 feet. To support such an immense weight, the rails themselves are one foot in breadth. Some idea of the colossal strength of this machine may be conceived when it is stated that it will be capable of lifting a weight of 1,200 tons. The work has been carried out by General Younghusband and Colonel G. Maitland from designs by Mr. Fraser, the Deputy Superintendent of the Royal Gun Factories, while Mr. Reuben Mehen has had the practical direction of its construction. The lifting carriage is seventy feet from the ground, and will with ease raise several 100-ton guns together. More than 1,800 tons of iron have been employed in the construction of this gigantic machine, which has already been upwards of four years in process of erection.

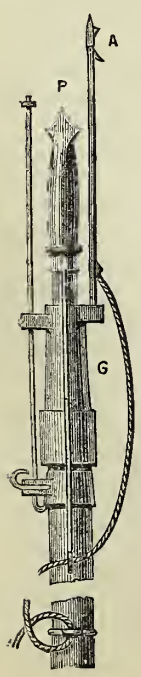


A Lightning Photograph.

We recently mentioned that Mr. Crowe had succeeded in taking some very distinct photographs of the lightning-flash, and we are now able to reproduce one of these taken during the severe thunderstorm which visited Liverpool on the night of Saturday, July 17th, last year. The camera was situated near Dingle, and the flash appeared above St. Philemon's Church, Windsor Street, at the moment the bell-tower was shattered to pieces. The flash is remarkably distinct, and exactly resembles the spark from a large induction coil. Its actual diameter is calculated by Mr. S. Higgs to be about fifty-one inches.

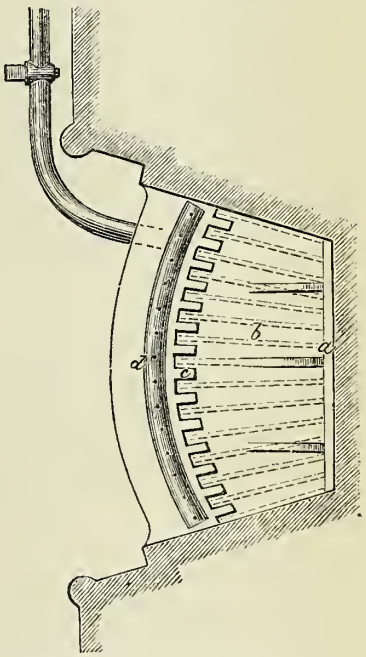
Explosive Harpoons.

Some of the new appliances for killing whales are not very well known; one of these is the bomb-lance of Mr. Pierce, New Bedford, Mass., which consists, as shown in the figure, of a lance-shaft, carrying at its end a small gun, G, which is charged with powder and loaded with the lance-point, P, which enters the animal. The lance is thrown by the harpooner at the whale, and the shock of striking it ignites a fuse, which fires the gun and shoots the pointed lance into the whale's body. The point carries a line with it, and the lance is also provided with an arrow-head, A, to pierce the whale and prevent the glancing of the stroke. Another weapon for the same purpose is the javelin-bomb of Mr. Voy, San Francisco, which differs from the bomb-lance in being actually shot from a gun held by the harpooner. It consists of a short stem, terminated by a conical bomb with a sharp point, which on entering the whale explodes, and at the same time liberates a barb which catches in the flesh. A line is connected to the shaft and fired with it. With this arm it is possible to strike a whale nearly 100 yards from the hunting-boat.



An Improved Smokeless Grate.

Dr. C. W. Siemens has further improved upon his smokeless grate, so as to enable existing grates to be altered to the smokeless form at a less expense than was necessary in the form described by us in the GATHERER of the January number. The new grate is shown in the accompanying plan, and only two parts require to be added to an ordinary grate to make it smokeless, viz., the gas-pipe *d*, with holes $\frac{1}{16}$ inch in diameter, placed $1\frac{1}{2}$ inches apart along the upper side, inclining forward: and an angular plate *a*, of either cast or wrought iron, with projecting ribs *b*, extending from front to back on its under side, either cast with or riveted to the plate, so as to present a considerable area and serve the double purpose of supporting the additional part on the existing grate, and of providing the heating surface produced by the copper plate and frill-work in the form of grate we have already described. In using iron instead of copper it is necessary, however, to increase the thickness of these plates and ribs in the inverse ratio of the conducting power of these two metals, and to make the iron plate $\frac{5}{8}$ inch thick instead of $\frac{1}{4}$, as in the case of copper. A bent plate fastened to the lowest grate-bar, to direct the incoming air on the heating surfaces, renders the arrangement more perfect. The niches, *c*, in the front plate are to allow the small quantity of ashes formed by the combustion of the anthracite or coke in the front part of the grate to discharge themselves into an open ash-pan placed upon the hearth.



The Ellipsograph.

Boys and girls often find it necessary in their school exercises to draw an ellipse. They know how to "strike" a tolerably correct circle, but they are not so handy at drawing a presentable ellipse. The Ellipsograph, then, is an appliance that would enable them to do this in a neat and satisfactory manner. It is constructed so that it may be adjusted to describe ovals of various sizes, with parallel curves, without disturbing the pivots on which the "guide" works.

A Trans-Australian Railway.

For many years past, the idea of a railway across Australia has occupied the minds of our colonial brethren. This long-cherished hope is at length in a fair way to become realised. The line first proposed was to follow the telegraph from Adelaide in an almost direct northerly direction to Palmerston in Arnhem Land (North Territory), but an alternative route has been proposed and lately adopted, by which a considerable saving in distance and in railway connections will be effected. From Brisbane to Rome, as will be seen upon the accompanying map, the railroad is already completed. From the latter town to the nearest point on the Gulf of Carpentaria is in a direct line, and, calculating in round numbers, 850 miles—against the 1,400 miles of the former route suggested. Besides the advantage gained by the connection already made with Brisbane, which can be united by railway with Sydney without great difficulty, the proposed new line will pass within a measurable distance of the existing railroad from Rockhampton to the mining districts near Beaufort, and may without difficulty be connected with it. The line will then be continued as straight as can be towards the Gulf of Carpentaria—the precise locality of the terminus not having yet been decided. When this route has been completed there will be continuous railway communication from north and south, and through the most settled districts. The northern coasts, being geographically nearest to England, will then be within thirty days of us, though at present they are the most distant. The Queensland Government has already authorised the work.



MAP OF PORTION OF QUEENSLAND, SHOWING (IN A DIRECT LINE) THE PROPOSED TRANS-AUSTRALIAN RAILWAY FROM BRISBANE TO THE NEAREST POINT OF THE GULF OF CARPENTARIA.

The Radiophone.

In prosecuting his researches on the photophone, Professor Graham Bell found that thin discs of every substance he tried—wood, leather, glass, india-rubber, metal, and so on—emitted a musical note when held in the path of a beam of light which was rapidly intermitted or broken up by interposing a rotating screen perforated with a circle of holes. Each hole allowed a flash of light to pass through it, and these flashes falling successively on the disc produced a vibration in it which was audible as a musical tone, of a pitch determined by the number of flashes per second, and a *timbre* dependent on the nature of the disc. Recent experiments of M. Mercadier, a French physicist, seem to refer the effect to heat rather than light, and prove it to be caused by the rapid expansion and contraction of the disc, as the heat-rays fall upon it or are stopped by the screen. To illustrate his theory he has constructed an apparatus which he calls a radiophone, consisting of a copper plate, which he heats red-hot, and a rotating screen with holes to intercept the heat-rays periodically. When the discs of Professor Bell are held in the path of the heat-rays from the copper plate, a musical note is heard, which diminishes in strength as the copper gradually cools. M. Mercadier's experiment is interesting, but not conclusive, for Professor Bell's effect may be the joint result of light and heat-rays acting together.

Heating Railway Cars by Steam.

The railway carriages on all the Government lines in Sweden are now heated by steam from the locomotive, on the plan of M. Lilliehök. The steam-pipe runs under the carriage in a wooden box, which is perforated with holes to admit the cold air which is heated by the pipe, whose radiating surface is increased by a number of attached discs. The heated air is then allowed to enter the compartment by valves placed beneath the seats, and under the control of the passengers themselves. Thus the temperature can be regulated, and since the hot air enters from below, the travellers do not suffer from cold feet.

A Cure for Snake-Bites.

"Guaco" is affirmed to be a certain remedy for snake-bites by a correspondent residing in New Granada, and writing home to the Director of the Royal Gardens, Kew. There are many plants known under the common name of guaco in South America, and all more or less possessed of the antidotal property in question, but the *Mikania guaco* is a variety of powerful efficacy. The writer of the letter asserts that when

properly and promptly administered the guaco is a sure remedy for even the most deadly snake-bite. It should be taken internally, in the form of an infusion or a tincture of the leaves, and hot poultices of the bruised foliage and stems should be applied to the wound.

Safety-Cheques.

A useful suggestion for making cheques which cannot be tampered with is offered by Mr. A. Nesbit, F.C.S. He points out that in order to erase writing-ink, either an acid or an alkaline solution must be used, and he therefore proposes to tint the cheques with a dye which is discoloured either by acids or alkalies. As a further safeguard against the restoration of the colour by subsequent immersion in alkaline or acid solutions, he would print the design and lettering of the cheque partly in acid and partly in alkaline inks.

Arctic Observatories.

The days of individual attempts to reach the Pole are almost over, and organised observatories within the Arctic Circle are likely to take their place. From such headquarters the country around could be leisurely and thoroughly explored, and valuable observations made, while more venturesome expeditions to the highest latitudes could be attempted as occasion offered. At the second International Polar Conference held recently at Berne, all the leading nations of Europe except England were represented, and it was definitely decided to establish scientific posts at various points in a great ring round the Arctic Circle. Austria has undertaken to erect a station in Northern Nova Zembla; Denmark, one at Upernivik in Greenland; Germany, one in Jan Mayen for the Arctic, and one in New Georgia for the Antarctic; Norway, Bossekop in Finmark; Holland, the south-east of Nova Zembla; Russia, the mouth of the Lena and the New Siberian Islands. Switzerland hopes to take part in the movement by establishing a post at Mossel Bay in Spitzbergen, and it is to be hoped that England will complete the ring by posts in Davis Straits, or on the Mackenzie River, North America.

Colour Relations of Metals.

Mr. T. Bayley has discovered some noteworthy relations between the colours of metallic solutions. It appears, for example, that iron, cobalt, and copper form a natural colour group; for if solutions of their sulphates be mixed together in the proportions of twenty parts of copper, seven parts of iron, and six of cobalt, the resulting liquid is free from colour, but is greyish and opaque. It therefore follows by the laws of colour that a mixture of any two of these elements is complementary to the third if the above proportions be maintained. Thus a solution of cobalt, which is pink in hue, is complementary to a mixture of iron and copper which is bluish-green. A solution of iron (yellow) is complementary to a mixture of copper and cobalt (violet); and a solution of copper (blue) to a mixture of iron and cobalt (red). Mr. Bayley further shows that a solution of copper is exactly complementary to the red reflection from copper; and a polished plate of this metal viewed through a solution of copper-salt of a certain thickness is silver-white. Hence it follows that a mixture of seven parts iron and six parts copper is identical in colour with a plate of copper. The resemblance, indeed, is so striking that a silver surface covered to the proper depth with the solution appears like copper.

The Colours of Flowers and Leaves.

We have generally supposed that the colours of flowers are due to a variety of matters—each colour in fact being a distinct chemical combination. But Professor Schnetzler, of the Vaudois Society of Natural Science, has proved, by experiment, that by putting spirits of wine and adding an alkaline acid to an isolated colour of a plant, all the colours which flowers present may be obtained. For instance, a peony flower will with alcohol give a reddish-violet fluid. Add salt of sorrel and it becomes a pure red; and by the addition of soda this red will change into a violet, a blue, or a green shade according to the quantity of the alkali used. The green colouring matter in the leaves of plants is called chlorophyll, and the professor supposes that this is the only original colouring matter in plants; but being modified by certain agents—for in all plants there are acid or alkaline matters—or by transmitted light, this chlorophyll furnishes all tints of flowers and leaves. It has been ascertained that tannin with chlorophyll changes the colours of the green leaves in autumn into red. Professor Schnetzler himself changed peony sepals from green to red with salt of sorrel; and the green liquid solution of soda with the peony blossom and alcohol became red when he transmitted light through it. He therefore concludes that chlorophyll is the only source of colour in plants, the others being merely the results of atmospheric or alkaline action upon that colouring matter.

Mica Soles.

The flaky, transparent substance known as mica, has been applied by an ingenious American to keep the damp away from the feet, by fashioning it into a middle sole for boots and shoes. Sheets of it are covered with thin coatings of cement to hold to the leather, and inserted between the upper and under layers of the sole.

A Speaking Condenser.

Another important development of the telephone has been made by a French *savant*, M. Dunand. This consists in employing the instrument known to all students of electricity as the "condenser" for a receiving telephone, like that of Mr. Bell, and getting speech from it so loud as to be heard when the ear is held a yard away. To hear Bell's telephone properly, or even the improved form of it devised

by Mr. Gower, which has been adopted by the Government Postal Telegraphs for the new telephonic business they have opened up since the recent telephone case was decided in their favour, it is necessary

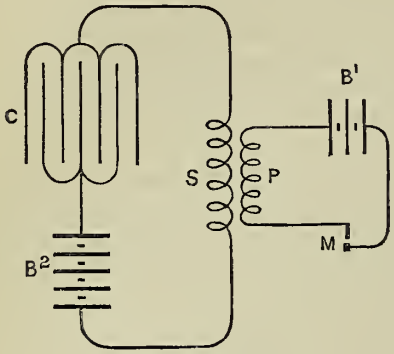


FIG. 1.

to keep the ear more or less close to the instrument; so that the higher tones of the new apparatus will be an advantage which Mr. Edison's "loud-speaking" telephone fails to supply, owing to the practical drawback of having to turn a handle all the while the speech is being delivered. A condenser is simply a set of parallel leaves of tin-foil electrically insulated from each other and connected together alternately—that is, the first, third, fifth, and so on, together, as shown in Fig. 1 at C; while the second, fourth, sixth, and so on, also go together. It has long been known that the intermittent currents of a musical telephone would make such a condenser give out a musical note or "hum" if they were caused to electrify the latter. But to M. Dunand attaches the honour of having made the vocal currents of a microphone transmitter reproduce articulate speech when allowed to charge the condenser. He has succeeded in doing this by means of an "induction

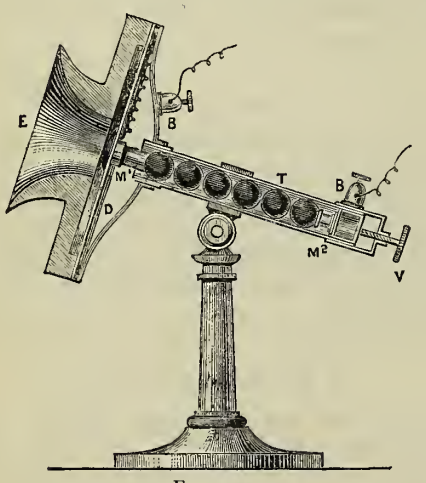


FIG. 2.

coil" and two voltaic batteries. A microphone, M, is placed in the "primary" or *exciting* circuit, P, of the induction coil, with a battery, B^1, to supply the electric current; and a condenser is connected by its two poles in the "secondary" or *excited* circuit, S, of the coil, together with a second battery, B^2, stronger than the first, and connected between one end of the secondary coil and one pole of the condenser, C. Under these conditions, the voice of a person speaking into the microphone transmitter generates vocal currents in the primary coil, which *induce* corresponding vocal currents in the secondary coil, and these passing into the condenser, which is already charged by the stronger battery, B^2, make the plates of tin-foil vibrate so powerfully and sympathetically as to give out an imitation of the original speech. With regard to the battery power needful, M. Dunand finds that ten Leclanché elements in the secondary circuit and two in the primary of an induction coil about four inches long will give quite a strong voice. If carefully applied to practical uses, this discovery should prove a great assistance to telephony and a convenience to public business. A very convenient form of microphone for telephonic purposes has been devised by M. Boudet of Paris. It is represented in Fig. 2, where E is the mouthpiece for speaking into, fixed at the extremity of a glass tube, T, mounted on a jointed stand, which allows the mouthpiece to be adjusted to any convenient angle for the speaker. An ebonite disc, D, which vibrates under the speaker's voice, carries a copper plug, M, fixed to its back, and this plug presses against the first of a series of six pellets of retort-carbon contained in the glass tube. By means of the thumb-screw, V, and the plug, M^2, at the other end of the tube, the pressure of the microphone contacts between the carbon balls can be regulated to give the best effect. The electric current enters and leaves the instrument by the terminals, B B. The purity of the speech as transmitted by this form of microphone is very striking, and the practical convenience of the instrument is considerable.

Roasting Meat by Hot Water.

Not long ago the American Society of Civil Engineers were entertained at a dinner which was cooked throughout by superheated water. The repast gave general satisfaction. Most people being familiar with boiling water as usually seen in the ordinary vessels, and as water under atmospheric pressure can be heated only as high as 212°—which is much below a roasting temperature—they may find it difficult to understand how bread can be baked or meat roasted in this novel manner. There is, however, no limit to the temperature to which water can be raised when it is confined, excepting only the weakness or strength of the vessel in which it is contained; and in this fact lies the whole secret of the new way of cooking dinners. A company has been formed in New York with the object of supplying houses with superheated water. According to their project, they undertake to maintain a temperature of 375° in the pipes of cooking ranges, a heat that is supposed to be sufficient for all culinary purposes. The matter is at present in its experimental stage, and it will probably remain there for a very considerable period.

THE PROBATION OF DOROTHY TRAVERS.

By the Author of "In a Minor Key."

CHAPTER THE FOURTEENTH.

LEAVE-TAKINGS.



"I GIVE you my word of honour it is true, every word of it, and I think—I mean—it is only friendly to tell it you. After all, there is no harm in it; girls are always in love."

It is the baron who is speaking from the depths of a most inviting easy chair in the library at Wrangham that same Sunday night, or rather Monday morning, preceding his departure to Germany; the person addressed is Geoffrey Ingram.

"Not English girls," he responds, with a puzzled look on his face, and ignoring the first part of his friend's speech, "but as you remark, baron, there is probably no harm in it, and, after all, it is no business of ours. What do you say to following Ernstein's example?—it is late," glancing at the clock, whose hands have travelled far into the small hours.

The baron, having discharged his mission, is willing enough to agree to this proposal, and five minutes afterwards perfect quiet reigns both in the library and throughout the house.

At Anne's request her devoted *fiancé* has consented to take on himself the disagreeable task of imparting to Geoffrey the little scene she witnessed between Dolly and the unknown young man in the plantation on the afternoon preceding the tableaux. Joan's refusal of Lord Rushbury has shown her that she still clings to the dream of Geoffrey Ingram. If she, Anne, can assist her to the realisation of that dream Joan will be proportionately grateful, and, if grateful, will be willing to do Anne a service in return. What more likely to bring Mr. Ingram to Joan's feet than to show him that the little girl he has taken up with so much lately is a silly school-girl unworthy of his notice?

All this Anne has worked out in her own head, and the baron has been selected as the fittest instrument wherewith to wing the little shaft so carefully prepared. The amiable little man has a natural love of gossip, and is not so averse to the task set for him, by no means taking a serious view of Geoffrey's visits to the school-room. He regards the offence on Dolly's part as most venial—in fact, natural—and tells Anne, much to her horror, that a pretty child like that is sure to have many a flirtation on hand.

Geoffrey has taken the communication so quietly that the baron is quite confirmed in his opinion that Anne is fanciful in her ideas, and that the whole thing is a case of great cry and little wool. In point of fact, however, Geoffrey is more perturbed than he cares to own to himself. After all, what is Dolly Travers to him that he should take the trouble to be put out because the baron and Anne—for he knows quite well whence the story emanates—have concocted this little tale between them? Is it concocted though? that is the question. And again and again he pulls himself up short as he finds himself recurring ever afresh to the subject, interspersed with fragments of Ferdie's conversation, "You don't know what a darling she is You will marry her, won't you?" Ah, ha! Master Ferdie, you are very astute, but you do not know quite everything, and you little dream of meetings in the woods with young men. No, little Ferdie has built his castle in the air, and nothing will induce him to knock it down. Asleep in his bed he is dreaming of it now, and there is a smile on his face as he murmurs Dolly's name softly in his sleep.

Monday morning dawns bright and beautiful. The little baron is up betimes, excited and fussy, swallowing his breakfast standing—to Sir Augustus' intense disgust—in order to be off all the sooner for a last quarter of an hour with Anne among the larches, for the Dowager Lady Travers will not allow him to come to the Lodge, and young Lady Travers, ever careful not to offend, will permit no rendezvous at the Manor.

Anne is walking impatiently up and down the narrow path, looking very pretty on this cold morning in her thick dark furs.

"Have you done it?" she asks eagerly as he comes up to her with both hands extended.

"Of course, as you commanded, I have obeyed."

"And what did he say?"

"Nothing."

"Nothing?"

"No, he only remarked it was no business of ours, and that it was getting very late—which was true. I tell you, Herzchen, you are mistaken, he thinks nothing of that little girl *aux yeux de velours*."

Anne frowns slightly. "I see nothing to admire in Dorothy's eyes," she answers coldly, "and I wonder which is the wiser, you or I. I tell you emphatically, we are one step nearer being married than we were yesterday."

"We might do that to-morrow."

"Of course, we might; but, emancipated as we

English girls are in your eyes, I do not care to create a scandal by marrying without my mother's consent. Patience, Adolf! it will all come right if you will but listen to me."

Adolf sighs heavily, and putting on his most sentimental air tells her he has only ten minutes left, which time he occupies in the usual "rites and ceremonies," as Anne calls them, of a *fiancé's* leave-taking.

In the school-room at Wrangham, Dolly has hunted up a German grammar and a new copy-book, and is preparing to begin her German with all the ardour usually attendant on a fresh undertaking. To-day is Monday, and did she not say she would begin on Monday? Rose and Lou are both willing to help her, and Ferdie has announced that his accent is perfect, and that he will hear her read of a day.

And all the time she is watching the door as she sits by Ferdie's side drumming French verbs into him —for he is much better this morning—and arithmetic into Augustus, whilst Rose and Lou perform a singularly hideous—so it seems to her—duet on the piano; and the monotonous one, two, three, four, going on unceasingly, is on the verge of making her irritable, even to Ferdie. What is the matter this morning? Why did she awake with a weight at her heart, as though something dreadful had happened, or was about to happen? and what has made her feel so irritable that she would give anything to shut up the piano, and put an end to that atrocious duet from "La Fille de Madame Angot," which Rose and Lou, in spite of their education in German classical music, think so very delightful?

"Oh! Ferdie dear, do pay attention," she says wearily, "you know the future perfectly well, why will you always mix it with the conditional?"

"I wonder if Geoffrey is coming to say good-bye to us," is Ferdie's irrelevant response. "I heard mother order the dog-cart at a quarter to eleven, and it is past half-past ten now."

"Never mind, dear; pay attention. Begin now the future of 'aimer.'"

"J'aimerai," commences Ferdie, and Dolly gives an approving nod.

"Go on," she says.

"Tu aimerais—hurrah! here he is," as the door opens, and Geoffrey Ingram walks into the room, looking unusually grave, and happily "Madame Angot" comes to an end with a sudden crash, as the two girls rise simultaneously from their chairs.

"I thought you had forgotten us," exclaims Ferdie.

"Not quite, Ferdie. I have just five minutes to spare for you, and to rescue you from French verbs."

"He is very tiresome over his French verbs, Mr. Ingram."

It is Dolly who speaks, but Mr. Ingram only says, "Is he?" and turns again to the children. He has brought a present to each of them; to Ferdie, a silver watch and chain, which makes the little boy speechless with delight for a minute, and then burst into wild expressions of pleasure; Rose, Lou, and Augustus have each some pretty trifle, but Ferdie's is by far the most magnificent present, and it is immediately secured to his blouse with an air of triumph it is most amusing to see. Dolly fastens it for him and then turns to poke the fire. She has an indescribable feeling that Mr. Ingram is different with her this morning, a feeling of being out in the cold that ties her tongue and renders her dumb. She had intended to tell him that she was going to begin German this very morning, but she says nothing about it now, only takes Ferdie's slate and rules it, whilst Mr. Ingram distributes his presents. He had intended one for Dolly too. Two days ago, impelled by he knows not what impulse, he had got out for her the little German Testament that had belonged to his mother, in reference to the conversation he had had with her respecting Macaulay's method of learning languages, but this morning it has been replaced to go back with him to Berlin. Nothing that had belonged to his mother must ever pass into unworthy hands. How sorry he had felt in so doing, Dolly does not know; she only feels that he is not the same person as he was yesterday—as he has been all along to her—and keeps her eyes fastened on the slate, which she rules entirely crooked.

"There is the dog-cart coming round," says Geoffrey. "Good-bye, children," and mindful of poor little Ferdie's prognostications yesterday, he stoops down and kisses the small fair face he may never see again.

"Good-bye, my boy; take care of yourself."

The two fragile arms are wound tightly round his neck, and he is given such a hug as is likely to ruin the set of his collar, as Ferdie kisses him again and again, and begs him to write to him. Then he shakes hands with Rose, Lou, and Augustus, saying something trivial to each of them, and finally turns to Dolly.

"Good-bye, Miss Travers," he says, looking at her gravely. The sweet brown eyes meet his, candid and fearless as usual. "Good-bye, Mr. Ingram; I hope you will have a pleasant journey."

"When shall you be back in England, Geoffrey?" asks Ferdie. "Not for a very long time," he answers, and with a parting nod and smile he leaves the room, and two minutes afterwards they all, except Dolly and Ferdie, crowd to the window to see him off. He looks up and nods, missing the one face he seeks, and the dog-cart drives off. In the schoolroom the ferment has subsided, and Dolly picks up the French grammar once more.

"You had better begin at the beginning again, Ferdie," she says, "with the present tense, 'J'aime,' I love."

The baron and Geoffrey have reached the station full ten minutes too early. The baron retires into the waiting-room to indite a letter to Anne, whilst Geoffrey walks up and down the platform. A train has just come in; there is but one first-class passenger. Mr. Ingram recognises the inevitable ulster and hat which, to Anne's dismay, Joan insists on wearing on a perfectly fine day, and advances to greet her, thinking he may as well make his peace with this amusing specimen of womankind before he leaves. Besides which, he likes Joan, likes her very much; she is so different to the common run of women, and as

to her little temper the other evening, why, he has almost forgotten that. So Joan is relieved to find herself met with an outstretched hand, and a smile from Mr. Ingram, as he asks if he can be of use in looking after her luggage, and she in answer wishes to know why he is at the station.

"I am on my way to London," he responds, "from whence I proceed to Berlin."

"No, really? I had no idea you were departing. I knew the baron went to-day, but not that you were his companion."

Geoffrey smiles peculiarly.

"I got my summons the day of the tableaux," he answers, "and somehow," with a twinkle in his eye, "I was prevented communicating the intelligence to you."

"I am afraid it was my own fault, Mr. Ingram," laughing and blushing. "I am penitent, I can assure you," and Joan looks up with a frank bright smile that is very taking. Then the luggage is identified, and carried to the Manor dog-cart, which has orders to wait for Joan; and Mr. Ingram, putting her into it, wraps the fur warmly over her knees, and gives her hand a hearty shake.

"We shall meet again before long, I hope," she says.

"At Berlin?" he asks.

"I was going to say, I hope so, and yet I cannot, for I dislike that whole affair every bit as much as does my mother."

"You will both come round in time, I dare say. He is a very good fellow."

"Ah! you really know him. It would be a great relief to my mother to hear something about him from some one she can trust."

"I think you may make yourselves quite comfortable as to your sister's happiness with him. He has many qualities which go to making a good husband, and he is most thoroughly amiable."

"I am glad of that; yet how Anne can!—but there, the less I say the better. I could not marry to live out of England to save my life. There is your train, Mr. Ingram—good-bye."

Another hand-shake, another bright smile, and Joan is driving out of the station, with a light in her eye, and a smile on her lip.

"At Berlin!" she whispers to herself. "I think he was very glad to see me."

CHAPTER THE FIFTEENTH.

AFTER TWO YEARS.

IT is November in Berlin. A cold, raw, north-east wind blows keen and cutting through street and alley, bringing down relentlessly the few yellow leaves that still cling to the well-known "Linden;" a dull thick mist broods loweringly over the town; the air is full of snow-clouds; the streets are almost empty of foot-passengers, and the few there are hurry along with their heads down, impatient only to get through their business and hasten home to their stove-warmed rooms. Nothing can look more cheerless than does the town, and Anne Stieglitz, who sits by the side of a real English fire in her spacious, prettily-furnished drawing-room, awaiting guests, shivers chillily, and murmurs something to herself about the abominable climate.

She is not much altered since we saw her last, two years ago. Still small and *mignonne*, with the slightly discontented expression yet hovering round her mouth, the abundantly fair hair, the china-blue eyes, clear pink and white skin, and high-bred little features, in spite of the same characteristics prevailing extensively at Berlin, have caused her to be much admired. But the "Baronin" is not popular. She does not take the trouble to disguise her dislike of the country in which she is forced to live; and as the baron, a true Austrian, shares her feelings completely, they, as far as they are able, confine their society to their respective country-people.

To-night, however, Anne is expecting guests of diverse nationalities; the reception-room is brilliantly lighted, and the baronin herself, attired in the last novelty from Paris, looks more than usually pretty. Little as she is addicted to meditation, this evening, as she warms her feet by the blazing fire, her thoughts have reverted involuntarily to England, and to the changes that have occurred since she left it two years ago with her mother, for whose sake the little party had set off health-seeking in the south of France. That mother is dead, has been dead more than a year; she herself has been married to the Baron von Stieglitz quite sixteen months; and Joan—foolish, impulsive Joan—is alone in the world. What will eventually become of her?

Anne has hardly had time to put the question to herself, much less to supply the answer, when the door opens, and Joan in person enters the room, in a long sweeping black dress. It is her first appearance in public since her mother's death, and she still wears mourning for her. She has been staying with Anne a month now, and has refused as yet to go anywhere, or do anything but hug with characteristic pertinacity her deep-felt grief at the loss of her mother. Nevertheless, she has found—although she would not for the world acknowledge it—the foreign custom of two or three friends dropping in after dinner very pleasant, and it has served to rouse her from her absorbing grief more effectually than more violent measures would have done.

Still she is wearying for England. It is nearly two whole years since she has seen it, quite two years since the doctors told her that the only chance of saving Lady Travers' life, endangered by a very severe bronchial attack, was to take her to the south of France. So the Lodge was let all in a bustle, the packing completed in an incredibly short space of time, and, after much trouble and anxiety, the poor invalid woman transported to Cannes, which she was destined never again to leave.

At Cannes, Anne was married to the baron, with her mother's consent, who, feeling that her end was drawing near, yielded to Joan's solicitations, and permitted the marriage to take place; and at Cannes, after a year's sojourn, full of suffering, poor Lady Travers

was laid in the English cemetery, her troubles over, her weary soul at rest.

And Joan can never look back on those last days of her mother's life without thankfulness, as she remembers how all the harshness and bitterness seemed to melt away, leaving the truer and better nature to stand out pre-eminent when face to face with eternity. The end came so suddenly at the last that she was alone with her mother—Anne being at Berlin—when it



"THERE IS YOUR TRAIN, MR. INGRAM—GOOD-BYE" (*p.* 259).

occurred, and she would indeed have been desolate had it not been for the Rushburys, who had spent the winter at Cannes for the sake of the health of the eldest daughter, who seemed fast following her mother.

Nothing could exceed their kindness and goodness to poor Joan in her trouble, or Lord Rushbury's delicacy to the girl he loved. The result was that ever since her mother's death she had been travelling with them in Italy, Switzerland, and Germany, helping to amuse the invalid girl, sight-seeing with Lord Rushbury and his mother, and growing daily in refinement and gentleness in the almost over-refined atmosphere in which she was living. Now she was come to stay with Anne for that long-ago wished-for visit to Berlin, which was destined, so she had thought, to bring her so much happiness. So far some of her ideas, which just now seemed as though they must have belonged to some one else, had been realised. She saw Mr. Ingram almost every day, and his presence served to make her feel more like the Joan of old days than did anything else. The old jokes were revived, the old understanding between the two renewed, Geoffrey treating her as, what he had always considered her, a thoroughly sensible, practical woman, enlisting her sympathies for some of the poorer English in the town in whom he was interested, and, truth to tell, unwittingly and unknowingly throwing the old spell over her, which, though slumbering, was not dead. It was a relief to him to talk to Joan after Anne Stieglitz's vapid insipidity, to meet with hearty co-operation instead of unmeaning nothings; and it was an understood thing that when he dropped in of an evening he should pair off with her.

To-night, however, is a different affair altogether: a reception of the *crême de la crême* of Berlin; and Joan, who has consented to appear under protest, purposes retiring very shortly. Dressed in a long black dress and a white mob-cap, she does her best to make herself look as old as she can, but Anne declares it is all vanity, for the style suits her so admirably that no

wonder she adopts it. Determined as she is to live by herself at the Lodge in future in the way she loves best, managing her own little farm, her own bailiff, her own coachman, she must, she says, say good-bye to all affectation of young-ladyhood, and turn into what she thinks she fain would look: a staid, almost middle-aged woman.

Geoffrey Ingram agrees with Anne when, on arriving, he catches sight of Joan standing in a corner of the room, talking to a German general, looking so handsome, so regal, in spite of her bad figure, that he thinks there must be a spice of *coquetterie* in the charmingly arranged costume. He knows every one in the room, and is a favourite, consequently he does not reach Joan's side for more than half an hour, though they have exchanged smiles over a crowd of heads. When, after some considerable struggling, he does gain her corner, she is alone, looking on with an amused smile, and admiring the way Anne does the honours.

"How do you do, Mr. Ingram?" she exclaims. "I have seen you long ago in the far distance, trying to circulate, whilst I have remained stationary in my obscure little corner."

"Chosen with much judgment; you command the whole room here; and whilst I have been playing the part of the mountain you have taken the more dignified one of Mahomet. I think all Berlin is here."

"Certainly a large section. I am lost in admiration of my sister. To me it is perfectly marvellous how she can remember all those titles. Why, some of them are as long as half a dozen English ones put together. I must really write to Louisa Travers, and tell her that Anne is a worthy disciple of her own, and made for society."

"Talking of Lady Travers," says Geoffrey, "I had a long letter from her this morning, with an invitation for Christmas and hunting. What do you think of four sheets full of Rose's conquests?"

"Thrillingly interesting, of course. Oh, Mr. Ingram, don't you hunger for England? I cannot tell you how I do. I dream of the dear place every night, to wake and find myself in—Berlin."

"Then, why don't you go to England?"

"I shall soon, very soon now; but my tenants do not quit the Lodge for another three weeks or more, and I feel a repugnance to staying with any one till I get into my own home, and settle down for life."

"That is looking very far ahead"—with a smile. "Should you mind going to the Manor?"

Joan shrugs her shoulders.

"My uncle would not have me," she says, with a smile. "He disapproves highly of me, for a variety of causes. No, I will never ask a favour of him. Besides," she adds, "there is no necessity for me to do so, for I hope to be settled at the Lodge before Christmas. I am like a school-girl; I mark off the days till my return." And even as she says the words a shadow falls on her face, as she thinks of what that return alone will be. "I have a little plan in my head," she continues, "which is, to carry back Anne and the baron with me, and all of us spend Christmas together."

"That would be very nice," says Geoffrey, who also has been thinking of the dreary home-coming it would be for Joan; "and we shall all meet on Christmas Day. I shall start almost immediately for England, and get a little hunting in Leicestershire before I go on to the Travers's, where I shall pay a long visit."

"Did Louisa mention Ferdie in her letter? I heard from Dolly a few days ago, and she seemed very uneasy about him."

"No; Lady Travers does not even mention his name. Is Miss Travers your correspondent in the family?"

It is the first time Dolly has been named between them: from design on Joan's part, and accident on Geoffrey's.

"She or Louisa generally writes to me," she answers.

"I am not surprised to hear a bad account of Ferdie; I never expected he would live. I am glad I shall see him again, poor little fellow! What a clever boy he is! Did he survive, he ought to make some noise in the world."

"A great deal too clever," responds Joan; "to my mind an intolerable child. There is something so weird and elfish about him that I cannot bear. I do not think his mother cares for him."

"No; he did not get much love or attention until Miss Travers appeared on the scene, and she made a different boy of him."

Joan looks up with a quick suspicious glance, but Geoffrey speaks so exactly as he would of any one else, that she feels ashamed of herself.

"Come and have an ice," he says. "Don't you find this room very hot?"

So they go down-stairs together, and discuss the company, some of whom, judging by their intimacy with each other, jump to the conclusion that they are "*verlobt;*" and when Geoffrey leaves Joan at last to turn his attention to some other guest, she slips quietly away to her room, feeling that her evening's enjoyment is at an end.

The next day, in her own impetuous fashion, she broaches the subject of the Christmas visit to Anne, who says languidly that she will think about it, and sets to work to write dozens of letters on the subject to various people whom it may concern. Adolf professes himself quite agreeable, being a violent Anglo-maniac, and most anxious for some hunting; and when, two days afterwards, she meets Geoffrey again, she is able to tell him that she should not wonder if she and Anne and Adolf all dined at the Manor on Christmas Day, as well as himself.

"Then I shall precede you by about four weeks to England," he responds; "and I hope we may enjoy many a good run together."

"As many as I can manage with my very limited stud, you may be quite sure. I want some hunting to disperse my cobwebs, and I sigh for a busy, energetic life."

"You are not absolutely idle here, judging by the progress you have made in German, and by the books that, to my knowledge, you have consumed."

"No, I could not be exactly idle; I should die of it. But I want more than books: I want human beings."

"Human beings that you have a right to, and, begging your pardon, over whom you have some kind of authority. Is not that it?"

Joan nods. "You are right," she says. "I am an autocrat by nature, and the life in this house does not suit me."

"That I can quite understand," he responds, with a smile; "so I hope that the next time we meet it may be in your own part of the world, when you will probably be mounted on old 'Fusilier.' Meanwhile, I must say good-bye, at the same time '*Auf wiederschen*,' very shortly."

CHAPTER THE SIXTEENTH.

BACK AGAIN AT WRANGHAM.

IF it is bad weather in Germany, it is equally so in England; if it is foggy in Berlin, it is damp, raw, and misty at Wrangham. Day after day the rain comes pouring down incessantly, the ground is marshy and sodden, the lanes are ankle-deep in mud.

All day long Ferdie lies on his couch in the schoolroom, white and small, fading even as the leaves, languid, listless, and fretful, little of his fun left in him, almost a shadow of his former self. Dolly is with him, for now she seldom leaves him. Sir Augustus, Lady Travers, and Rose are staying away with some friends for concerts and other gaieties, but Dolly has elected to remain with Ferdie. She perceives what his father and mother persistently refuse to see, that he is not long for this world. She has urged it passionately and eagerly on both father and mother to take him to London, to send for the best advice to Wrangham, to do anything, everything, to save him; and they have both answered her in the same strain that they are perfectly satisfied with Dr. Hicks, whom they assert to be notoriously clever; that Ferdie always fails with the falling of the leaf: in short, convey to Dolly that she has no business to interfere. She is, in consequence, temporarily in disgrace—no longer "dear little Dolly," but "Dorothy." Rose's star has risen with an effulgent light, that threatens to submerge any lesser luminary, and it is prophesied that undoubtedly she will be the belle at the county gathering this winter. Some people who have seen Dolly venture to think her the prettiest, but as beauty is very much a matter of fashion, and not of fact, and as Lady Travers has somehow managed to convey that Rose is the one to be admired, most people follow suit, and do as they are bid.

And Dolly, guardian angel to Ferdie and promised wife to Harry, does not attempt to enter the lists. When any amusement does come in her way she enjoys it thoroughly and heartily; she has made her father understand that she is as fond of riding as Rose, and Lady Travers that she is by no means above pretty dresses; but having declared her intention of not being a cipher, she almost renders herself one by her devotion to Ferdie. The child is part and parcel of her life; sleeping or waking, he is her first thought, and her greatest happiness is to win a smile or laughter from him. It serves Lady Travers' purpose admirably, and she is only too delighted that her stepdaughter should cultivate such excellent habits. But during these two years Dolly has learnt partially to see through her stepmother, and, as to all young people, the *désillusionnément* has been a very painful process. And as yet it is not complete, for she still believes in Lady Travers' kind and friendly intentions with regard to herself and Harry, and leans on them as eventually to bring about the marriage to which Sir Augustus is now the only obstacle.

For old Mr. Leonard is dead—found one morning sitting as usual in his arm-chair in the library, his book open before him, the pale morning sun lighting up his white set face. The housemaid who came to dust the room could hardly realise that it was not a living man that reclined thus motionless by the table, where he had read and written for the last twenty-two years, dying as he had lived, solitary and alone. On investigation his affairs were all found in most perfect order, and at the age of twenty-two Harry succeeded to the unencumbered estate of Holme Regis and all his father's large fortune, save £20,000 left to his sister Margaret.

Armed with these powerful credentials, he arrived one afternoon about six months ago at Wrangham, and, pretty confident this time of success, asked unhesitatingly to see Sir Augustus. His arrival was not unexpected. Lady Travers, having noticed the death of old Mr. Leonard in the obituary in the *Times*, had foreseen and duly prepared her husband for it. Fully instructed by his wife, Sir Augustus confronted the young man in his study, where he gave him the most freezing reception, and asked him to what he was indebted for the honour of his visit. Poor Harry, taken aback by his coldness, blushed and stammered, and stammered and blushed, and the more confused he grew, the cooler, if possible, waxed his host, who possessed in an eminent degree one qualification for a diplomatist: he knew when to be silent. As he sat there, with a conventional smile on his thin set lips, awaiting with perfect patience and *sang-froid* all that Harry had to say, the poor boy became more and more involved. He was not eloquent at any time, and the monumental silence of Sir Augustus, who sat rigidly attentive whilst he floundered about in his own explanations, only served to make him more nervous. At last he contrived to put into fairly coherent language what most men would have trumpeted forth with no uncertain sound: that as he was now the independent owner of Holme Regis and a large fortune, he had come once more to propose in due form for Miss Travers' hand, and he trusted Sir Augustus would withdraw all his former objections. But Harry, young and simple, was no match for Sir Augustus, or rather, for Lady Travers. The former now assumed his most solemn, so to say, funereal air, which, as indicating a change of tactics, struck terror into Harry's soul, as, slowly and with cruel deliberation, he a second time negatived the alliance, on the grounds that he had made diligent inquiries into Harry's character whilst at Oxford, which was reported to him to be of such

a nature that he could not on any account think of confiding his daughter to his keeping.

The young man stood aghast. Rapidly he reviewed his Oxford life, and was fain to confess that it had not been absolutely immaculate; but then, whose was? His spirit rose within him, and he insisted on knowing the charges brought against him; but if he was determined, Sir Augustus was a miracle of obstinacy, and no earthly power could have induced him to put a specific name to the frivolous accusations he had conjured up against Harry. It was like beating against a rock to try and rouse any mercy in him. The boy asked to see Dolly, and was refused; he begged to write to her, and was told that if he attempted any communication she should be sent to the Continent, away from home, where she was extremely happy. He said he would refute anything that had been said against him, and Sir Augustus smiled pityingly, till at length, stung almost to madness, he flung himself out of the house in a passion, vowing to himself that he would wait until Dolly was twenty-one and then run away with her. He took a room at the hotel in the neighbouring town, in the hope of seeing her, and she was all the time at the seaside with Ferdie; he wrote her a letter, which Sir Augustus and Lady Travers read together, with a hearty laugh on the latter's side; and, finally, he went home, breathing vengeance against the iniquitous beings who had taken away his character.

For Harry, in spite of his age, was still the veriest boy, and would be one to the end of the chapter. He had had no occasion to make the sacrifices he had intended, which might have ennobled and elevated his character. True, he had read, and read hard, but only to be plucked in examination, and the disappointment at his failures had caused him to throw himself into the arms of a very fast set, which fact had been the groundwork of Sir Augustus's charges against him. Shrewd as he was in all country matters, which made him a born farmer, with a wonderful eye to any live stock, an aptitude for topography, an intuitive knowledge of soils, trees, and plants—in fact, of everything appertaining to nature—Harry's vocation in life should have been to make his way in the colonies, but at book-learning he was incorrigibly stupid. He felt it himself, knowing well that in point of intellect and refinement he was no match for Dolly; and, sitting alone with his sister at Holme Regis, surrounded by all that money can give, without the one object that would have lent such vitality to the rest, he resolved in his own mind to bridge over the time that must elapse before Dolly was of age in travelling over the Continent, and acquiring the knowledge and polish that should make him a fit husband for such a wife.

And Dolly, who knew that Mr. Leonard was dead, wondered why Harry did not renew his suit, yet never doubted his faith, worrying about it quite silently, and longing to see Holme Regis once more, to hear Uncle Tom's cheery voice, to see Aunt Mary's loving smile, and to tell them all her troubles; for that August visit to Holme Regis had never come off, the reason assigned being the proximity to the Leonards, which would render it disagreeable. It was a reason which would not hold water, as Harry was nearly always away from home, but Lady Travers was afraid of what might occur if Dolly went there alone, and thought it safest to keep her under her own eye. Thus, save for six weeks in London and a month at the seaside, Dolly had hardly left Wrangham since her arrival there two years ago.

Yet, but for the worry about Harry, and a ceaseless yearning for a sight of Mr. and Mrs. Bruce, she was happy at home. So far Sir Augustus had told the truth. She was a prime favourite with her four brothers and with Lou, whilst Sir Augustus, Lady Travers, and Rose had all arrived at the conclusion that she was a capital element in the house. She had made enthusiastic friends of Mr. and Mrs. Graham, had in a great measure filled up Joan's place in the village, and her hands were in consequence quite occupied. Such a life was too full of interests to be unhappy, and yet she has altered from the Dolly we knew two years ago. Taller, and even slighter than she was then, her face has lost its roundness, and lengthened into an oval, the outline of which is only broken by the rather square little dimpled chin; in the brown eyes there is a far-away look, consequent on constant waiting, and the daintily curved lips are closed more tightly than formerly, the outward expression of much inward exercise of self-control.

"Dolly, what are you thinking of?" asks Ferdie, extended as usual on his couch in the school-room, whilst the rain drips heavily against the window-pane. "Do you know they will all be home directly? and we have not half settled our presents yet."

"No more we have. Come, Lou, let us have a consultation." So with pencils and paper, in order to amuse Ferdie, the two girls sit down to write out what shall be given to every one as a Christmas present, whilst all the time Dolly is cogitating in her own mind how Ferdie is to see Sir George Pitt, the great London doctor, for his case.

"Geoffrey will help us," says the child in the middle of his scribbling, and it comes like an answer to her thoughts.

The sound of wheels and of voices disturbs the trio in the school-room, and Lou, throwing down her pencil, flies out of the room to greet Rose and her mother, and to hear all the news.

"Don't go, Dolly," says Ferdie. "I suppose mother will come and see me?"

"Of course she will, dear."

But moments turn to minutes, and minutes into half an hour, before Lady Travers at length appears. She enters the room with an air of intense cheerfulness, greeting Ferdie in the same style, as though by thus doing she had the power of making the child well, and whilst kissing Dolly affectionately, remarks how much better he looks.

Two years have altered my lady very little, save that she is a trifle stouter, otherwise she looks more like her daughter's elder sister than her mother. Rose follows, with an air of amused contempt on her face, kisses Ferdie, and nods patronisingly to Dolly.

"The school-room division is invited down to tea in the drawing-room this afternoon," says Lady Travers, still in the same unnatural voice. "You must want a little change of society, my dear Dolly, and Rose has much to tell you;" and, without waiting for an answer, she sweeps out of the room.

"Stay here, Rose," says Dolly, "and tell us all about it. Who did you meet, and what did you do? Begin at the beginning."

"Ah!" says Rose, with the little languid, supercilious air she has assumed since she came out, "don't you wish you had been there, Dolly? Such nice people—quite, quite too charming!"

"Quite, quite too awfully charming!" mimics Ferdie. "Then I guess they were swells."

"Really, Dolly," and Rose's lip curls disdainfully, "you must not expect me to stay here. I cannot, I really cannot stand this dreadful child."

"Don't be huffy, Rose dear," says Dolly, with difficulty refraining from laughing, and only too pleased to see a gleam of Ferdie's old impudence. "Stay here and tell us all about it, and I promise you Ferdie shall not offend again."

Rose is mollified, and being secretly on thorns to relate all that she has done and experienced, sits down once more and begins an account of her visit, in which the name of a certain Lord Marsland figures largely; but Ferdie is forbearing, and has sunk into his normal listless apathy, and the narrative is brought to a termination without any further interruption. Rose yawns and throws herself back in her chair. "It will be dreadfully dull at home now," she says, "till we get the house full, with only Geoffrey Ingram here."

"What!" cries Ferdie. "Geoffrey Ingram here already? When did he come? Where is he?"

"Oh! did not you know? He arrived with us; he has come on here two or three days earlier for some reason, I forget what. You do interrupt so, Ferdie. I was just going to tell you that Lord Marsland and the Trevors, besides some other people, are coming here for the gaieties in January;" and Rose gives a little self-conscious smile, and looks at herself in the cracked school-room mirror.

"Bother Lord Marsland!" ejaculates Ferdie; "I want to see Geoffrey. Dolly, do go and find him."

"I think he must be with father, dear. We shall see him when we go down to tea in the drawing-room;" and as Rose leaves the room Dolly follows her, with the sudden recollection that her dress is shabby, and had better be changed.

Geoffrey is sitting in the library with Sir Augustus and Lady Travers, in the same identical chair he used to occupy two years ago, when the little procession comes in. Sir Augustus is extraordinarily cheerful; Lady Travers, never elated, is nevertheless beaming. They are hearing the latest Berlin news, in their turn recounting all their own, in which their recent visit plays a large part. Mr. Ingram's inquiries after Ferdie have been very cursorily and airily dismissed, and he is just about to return to the subject when the door opens and Ferdie himself is carried in, followed by Dolly and Lou.

At the sight of the little shrunken form and faded face, from which all its former animation has departed, Geoffrey starts involuntarily, shocked beyond words to note the alteration those two years have wrought in his little friend. Advancing to meet him, he takes the child in his arms as in the olden days, and placing him gently and tenderly on the sofa, is greeted with a warmth and fervour that threatens to strangle him.

"Oh, Geoffrey! dear old Geoffrey, how awfully glad I am to see you!"

Even the voice is feebler than of yore, and the two arms that meet round his neck fall asunder immediately, as though exhausted by their own efforts, as Geoffrey turns gently aside to shake hands with Dolly and Lou. At first sight he hardly recognises the former, so much, to his eyes, does she seem altered. There is nothing of the child left, only—so he thinks—a very lovely girl. The brown eyes are, however, just the same, the smile too, but both heightened and improved by the setting. Rose, with her intensely brilliant complexion, her flashing eyes, thick black eyebrows and hair, and rather broad lips, looks absolutely coarse by the side of that slim graceful girl, with eyes that are always watching Ferdie, and whose face lights up as she greets him with that most bewitching smile of eye and lip only.

"Sit by me, Geoffrey," asks Ferdie, and Mr. Ingram complies, whilst Rose takes possession of the tea-table; the rest gather round it, and there ensues an hour of delightful chat by the firelight. Dolly takes part in it from time to time, but it is mostly on events in which she has not participated. Ferdie, white and listless, listens at first, but, contrary to his practice, says no word. The mere coming down-stairs and the excitement of seeing Geoffrey have been too much for him, and he lies there nerveless and exhausted, yet no one seems to notice it but Dolly and Mr. Ingram.

The latter is getting a little tired of the key-note of the whole conversation, Rose and her triumphs, whilst the subject of it puts forth all her airs and graces for the benefit of the man she has known since she was a child, and on whom they are utterly lost.

"And why did you not go on this visit?" he asks suddenly, turning to Dolly.

Dolly blushes and is embarrassed, having no wish to pose as a self-denying Cinderella; but Ferdie, who has guessed her thoughts, comes to her rescue.

"She stayed with me," he answers for her; and Lady Travers puts in a gentle, "Yes, dear Dorothy was very good, and preferred remaining with her little brother."

Mr. Ingram moves round to Dolly's side, ostensibly to ask Rose for another cup of tea, but there he stays, for she lifts her eyes to his face, and asks him to tell her something of Joan and of Anne Stieglitz.

The account of the half German, half English household, the little baron's struggles for his own way gently and firmly extinguished by Anne, Joan's longings for England and her own home, and the little she has told him of her mother's death, are all interesting to both Dolly and Lady Travers. Sir Augustus alone is much perturbed at the idea of Joan living by herself,

but his wife, with a sidelong glance at Geoffrey, consoles him.

"Don't be afraid, Gus. I prophesy that before she has been home a year she will have turned into Lady Rushbury."

"I only hope she may," responds her husband; "but I confess I do not expect her to do anything so rational, for she is almost, if not quite, as foolish and headstrong as her mother."

"We shall see," returns Lady Travers, still looking at Mr. Ingram, who, talking imperturbably to Dolly, is apparently unaware that his countenance is being narrowly watched. He continues his conversation, unmoved by the dialogue between husband and wife, till the dressing-bell rings, and Ferdie requests him to carry him up-stairs.

"What a light little burden it is!" thinks Geoffrey, as he takes the child in his arms and bears him to the school-room, looking down on the small white face, that seems to have dwindled to half its former size. Dolly follows, settles him on his couch, looks to see that his supper is all right, and puts everything ready to his hand—his book, his slate, his toys—and summons Gretchen before she leaves him, to dress for dinner.

Mr. Ingram watches her, and suddenly remembers that this is the girl who clandestinely met a young man in the woods two years ago, and, from all accounts, behaved herself in a very extraordinary manner on that occasion. Is it possible? and if so, what has become of the young man? There is a tinge of sadness in the sweet face, a look of watchfulness and self-control in eye and mouth; can they have any con-



"SO HE JOINS THE TRIO AND MAKES HIMSELF AGREEABLE" (*p.* 268).

nection with that event? And then, as Dolly is about to leave the room, he throws away the unworthy suspicion.

"A fabrication, the whole thing," he thinks, and follows her. She turns round on the landing when they are well out of earshot of the school-room.

"Oh! Mr. Ingram, tell me, what do you think of Ferdie?"

If Mr. Ingram had spoken the truth he would have answered, "Dying!" but as it is he only responds—

"He is dreadfully altered."

"He is very, very ill," Dolly cries passionately; "and no one will see it, no one."

"You do not mean to say that they have no advice for him?"

"Yes, Dr. Hicks, who has always attended him, and who says it is the weather."

The rustling of a silk dress is heard. Dolly turns down the passage to her room, and Geoffrey saunters off to his, meeting Lady Travers at the foot of the staircase.

"You good creature!" she says. "You really must not spoil Ferdie too much."

Geoffrey's face is grave to severity. He feels a sudden contempt of the beautiful smiling woman before him.

"I think there will not be much more spoiling for Ferdie from any one," he remarks, in a tone of such freezing gravity that Lady Travers is silenced and passes uneasily on her way, whilst Mr. Ingram repairs to his room.

His thoughts are much of Ferdie, but more of Dolly. How beautiful she looked as she turned her troubled face to him on the landing, appealing to him about her brother! What an embodiment of his ideal woman as she busied herself with Ferdie in the school-room! In Lady Travers' boudoir some one—is it Rose?—is singing:

"Where and how shall I earliest meet her?
What are the words she first will say?
By what name shall I learn to greet her?
I know not how; it will come some day."

The song continues almost to the end, then breaks off suddenly, but Geoffrey supplies the deficiency in his own way—

"I have found her at last, my queen, my queen!"

CHAPTER THE SEVENTEENTH.

LIFE OR DEATH.

THERE is a stir in the household at Wrangham, and the person who has occasioned it is Geoffrey, the guiding power Dolly.

Alone in the library with Sir Augustus, Mr. Ingram has lost no time in speaking to him on the subject of Ferdie with a downrightness and undisguisedness that leaves no choice but immediately to send for the very best advice for the child. Lady Travers has given in at once, conscious of the uselessness of resistance, and consenting at last, though unwillingly, to have her eyes opened. Neither she nor her husband is wilfully neglectful. They would be horrified had any one told them that they had stood in the way of their own child's recovery to health, but Lady Travers—and Sir Augustus is nothing but her echo—has a happy knack of not seeing what she does not wish to see, of deceiving herself as well as others, and there are few people who care or dare to tear the veil from her eyes.

But Geoffrey has no such scruples. His indignation at the gross neglect of Ferdie, as he terms it, surprises even himself. With an inherent horror of meddling with other people's affairs, he has, on this occasion, set light to the slumbering family mine with a ready hand, and the result is the expected arrival of Sir George Pitt.

Ferdie takes it very serenely, apparently not caring in the least whether he comes or not, but it is far otherwise with Dolly. What she has been longing and praying for is about to come to pass through her agency, and, while thankful that it is so, she dreads it more than she can say, dreads the sentence that may be passed upon her boy, dreads the suffering that may be in store for him.

And when the great man does arrive, and is received in her most seductive manner by Lady Travers, who has resumed all her old pensive grace, Dolly feels as though she must fly out of the house—go out walking, riding, anything, anywhere, to get away from his presence. Instead of which, she is brought prominently forward; for on Sir George asking who has attended most to the child, seen after his diet, and so on, Lady Travers, with a murmured excuse of the burden of a large family, is obliged to confess that her daughter has had the main care of him.

Sir George's manner is hard and dry as he puts searching questions, one after another, to Dolly, all of which she answers with the accuracy that is a part of her nature, and with a fulness which says much for her watchfulness. The care and observation of the case are very apparent, and Sir George, who had not expected much from so young a girl, is moved to a faint acknowledgment of the precision with which she has answered his many inquiries. And then at last he is taken up to Ferdie himself. Dolly's heart beats so fast and so loud that she can hardly move; and when they reach his room, and Lady Travers and Sir George go in together, gently closing the door in her face, she feels almost relieved, much as she longs to be with her boy at this trying moment.

So she remains outside, walking up and down like a caged animal, conjuring up one sentence after another, one moment filled with hope, the next cast down with fear. It seems to her hours and hours that they remain closeted with Ferdie. In truth it is a long time, but just as she is beginning to fear the worst the door opens, and they emerge from the sick-room. They neither of them show any surprise at seeing her there. Sir George's face is as cold and impassive as when he went in, Lady Travers' white and serious. Dolly gives them a look of dumb inquiry, to which Sir George alone responds.

"Your brother wishes to speak to you now, but I shall be obliged to trouble you a little further when he

has done with you." Very polite and courteous, but telling her nothing.

"Come down to my boudoir, Dorothy, in five minutes," adds Lady Travers, and they both pass down the staircase, leaving Dolly a prey to a thousand torturing conjectures. Bringing all her self-control to bear to repress all symptoms of agitation, she enters Ferdie's room as calmly as usual. He is slightly flushed, and oh! so tired.

"Dolly, come and sing to me, will you? I am so tired," he says. And the girl kneels down by his side, with his head nestled against her shoulder, and sings him one of those sweet sleep-inspiring German lullabies that he is so fond of.

"I am so glad that man is gone, Dolly," he interrupts. "As though it were any use any one coming to see me."

There is such a lump in Dolly's throat that she has to break off her song.

"My darling, he will do you good," she says, and bends down to kiss him, to hide her tears and stop the little shake of the head he gives.

"Do me good, Dolly! You know, and I know, and soon every one will know that that is nonsense."

Dolly feels as though just now she could not bear much more.

"My sweet," she says, "I must leave you, only for a few minutes, but I will be back very soon, and sing you to sleep." And without waiting for his answer, which she dreads, she slips out of the room to repair to Lady Travers' boudoir.

When, almost as white as Ferdie himself, she enters the room, she finds Sir George seated at the writing-table, whilst Lady Travers, with a troubled face and a handkerchief in her hand, stands by the fire.

"Tell me," murmurs Dolly, as she passes her stepmother; but Lady Travers says, "Hush!" and Sir George wheels suddenly round from the writing-table.

"I have to give you some last instructions about the little boy, Miss Travers," he says, in that cruelly cold voice of his, "as I understand you have the chief care of him."

"Yes."

"I have been telling Lady Travers that I will send her a nurse from London for him."

"Oh!" with a little gasp.

"But still"—this rather more warmly—"you can constantly be with him: in fact, the nurse will require rest, when you or Lady Travers can take her place."

He then proceeds to give her detailed directions as to the remedies and measures to be adopted with Ferdie, and winds up by looking at his watch. The cold business-like manner quite stultifies Dolly; how ardently she longs to ask a question, and dare not, as she listens and writes down!

"Did you wish to ask me anything?" he adds courteously, noting the interrogation shining out of her eyes.

"Is there—is there—will he get well?"

She brings it out with an effort, and Sir George looks quite kindly at her, but very gravely.

"I have given Lady Travers my true opinion," he answers; and Dolly, glancing at her stepmother, perceives that she has her handkerchief to her eyes.

Three minutes afterwards Sir George is rolling away to the station, and Dolly is in her room, sobbing her heart out in great passionate sobs, which seem as though they would suffocate her, struggling with all her strength for composure to go back to her darling.

For Sir George, who has seen enough of men and women to gauge pretty surely their characters in the space of the few minutes that are usually allotted to him for the purpose, has not hesitated to tell Lady Travers the exact truth as to Ferdie. There is no hope for him. He may live months, even a year, but there is but one issue to be expected for him, and that is a fatal one.

This opinion, in a very modified form, Lady Travers imparts to Dolly, sufficiently alarming to make the girl very wretched, but not so much so as to suggest that the Travers' themselves should give up going out or participating in the few gaieties that go on in the winter. But Dolly has not lived two years with her stepmother without, in a measure, comprehending the tortuous nature of her character, and, guided by the instinct of love, it requires no great penetration to read between the lines of this carefully prepared edition of Sir George's opinion.

And on this eventful day Geoffrey has gone out hunting, thinking it the kindest thing he can do to take himself out of the house. As Dolly kneels by the side of her bed, she hears the sound of the horse's hoofs on the hard ground, hears him dismount, and the groom lead away the animal.

"He will be sorry," she weeps; "he is always so good to my darling." And somehow the sobs grow less, and she is able to rise up, and smooth her hair and bathe her face before she goes to Ferdie. He will be getting impatient; she must not cause him the faintest annoyance now; so she leaves her room, and repairs to the school-room.

"How long you have been away, Dolly! You have been to see that man, have you not?"

"Sir George?"

"Yes. What did he say about me?"

"He only gave me all directions as to how you were to be treated, darling, and I have them all written down here."

"And he is going to send me a nurse, he says. I won't have a nurse. I will have no one but you, Dolly."

"I shall always be with you, dear, just as much as I am now."

"It won't be for long, you know, Dolly."

Dolly kneels down by the couch, and lays her head on the pillow by the side of Ferdie's, and whispers to him, till a faint smile breaks out on his face, and he puts up one little thin transparent hand and strokes her cheek.

"I wish I knew your Uncle Tom, Dolly, and that he had taught me," he says, and gives a little start as the door opens gently, and in the dim firelight they see Geoffrey Ingram standing.

"May I come in?"

"Of course you may," responds Ferdie; and Geoffrey, who has been unable to find any one to tell him the result of Sir George Pitt's visit, feels relieved at the cheerful voice. He fetches himself a chair, and Dolly withdraws into deep shadow, so that he should not see her tear-swollen face, and sits mute and quiet in a kind of dream, listening to Geoffrey's voice as he recounts to Ferdie the day's events.

A kind of numbness has taken possession of her, through which she hears his voice rising and falling, till Ferdie exclaims, "Come close to me, Dolly," and she draws nearer, and takes his hand in hers. And all the time Geoffrey never speaks to her, but extends the day's sport in the most marvellous manner, whilst Ferdie's quick little mind and topographical knowledge takes in every turn of the fox, sees the whole panorama spread out before him, and forgets to think of himself. A soothing calm falls on Dolly, till she too is compelled to listen; and although she is aware that much fable is being mixed with fact, still she cannot help being interested, particularly as there is an air of truth about the whole for the benefit of such a sharp little being as Ferdie.

"That was a wonderful run!" the child exclaims with a long-drawn breath. "Do, Geoffrey, send an account of it to the papers. Ah! how I should like to go out hunting just once. I think I should ride well."

Gretchen brings in the lamp, and its clear light falls on Dolly's face, and Geoffrey knows he need ask no questions, for although she turns away rapidly, he has a quick eye, and has detected at once the traces of those tears in her bed-room. Apparently, however, he sees nothing, but he gets hold of a bit of paper, on which he executes a series of hunting sketches, depicting the events of the day, which causes Ferdie the deepest delight; and Dolly, reassured, draws nearer to the table with her work, saying a word now and then, in order that Ferdie should not perceive how miserable she feels.

Later in the evening Lady Travers comes in to sit with the child. There is a chastened resignation about her, which tells Geoffrey the same tale as he has already gathered from Dolly's truer countenance, as he idly continues to draw, whilst Dolly disappears quietly to dress, in order to sit with Ferdie till the dinner-bell rings. On her reappearance Mr. Ingram and Lady Travers quit the school-room together, and Geoffrey makes the speech he has been meditating during the past hour.

"Lady Travers, I am sure you must all want to be alone now," he says, with sympathy in voice and manner, "so you must not think me very rude or ungrateful if I take myself off to-morrow. It will not inconvenience me in the slightest degree, for I have plenty of friends to whom I can go."

"Indeed, Geoffrey," murmurs Lady Travers in her most subdued tones, trying to conceal the annoyance she feels, "you are most kind, most thoughtful, and I have no doubt that this house, with its burden of affliction, will be irksome to you now. But I do not intend to shut ourselves up, much as I, personally, feel inclined to do so. Our darling child has many months, perhaps even years of life before him, although we cannot expect to keep him with us always, and therefore, for the sake of the dear girls and my husband, I do not feel justified in anticipating trouble, and for the present we shall go on just as usual. Dear Rose has not been told Sir George's opinion of her brother: it would break her heart; and I have hardly yet ventured to express it to Sir Augustus; therefore, Geoffrey, unless you fear to find us too dull in our sadness, do not leave us. We expect friends next week, and hope, as I said before, to go on much as usual, with a heavy heart on my part. But we must all—and a mother above all others—sacrifice ourselves when the occasion presents itself." And Lady Travers glances into Geoffrey's face to see how much or how little of this speech he has taken in. But his countenance is perfectly impenetrable as he responds that he is only too pleased to stay, only Lady Travers must not hesitate to give him notice to quit the very moment that she is tired of him.

At dinner that evening he sits opposite Dolly, and has time to study her—as much as Rose will allow him—to note with ever-increasing pleasure the clear white skin, the soft sweet eyes, and above all to listen to that great charm, a pretty voice. It sounds deep and low after Lady Travers' and Rose's clear, childishly high trebles, and conveys a sense of repose which is grateful. There is no indication of broken-heartedness at present about Rose. Her conversation turns entirely on the Christmas gaieties, on the coming parties—on everything, in short, in which she is interested—as, unmindful of her father's extra solemnity, her mother's air of chastened resignation, she rattles on, oblivious of her consonants, and mercilessly ignoring the letter "r."

The constrained wearisome dinner comes to an end at last, and before very long Geoffrey finds his way to the ladies.

Rose, Lou, and Lady Travers alone are sitting over the fire: no Dolly is there; so he joins the trio and makes himself agreeable.

"Now confess, Geoffrey," says Lady Travers, "are you not bored to extinction here? Would you not be thankful if some one would send you a telegram to summon you from this dull house?"

"Not at all," he responds; "I am perfectly happy here. Being thoroughly at home also"— with a glance at Lady Travers and Rose—"I fail to discover the dulness."

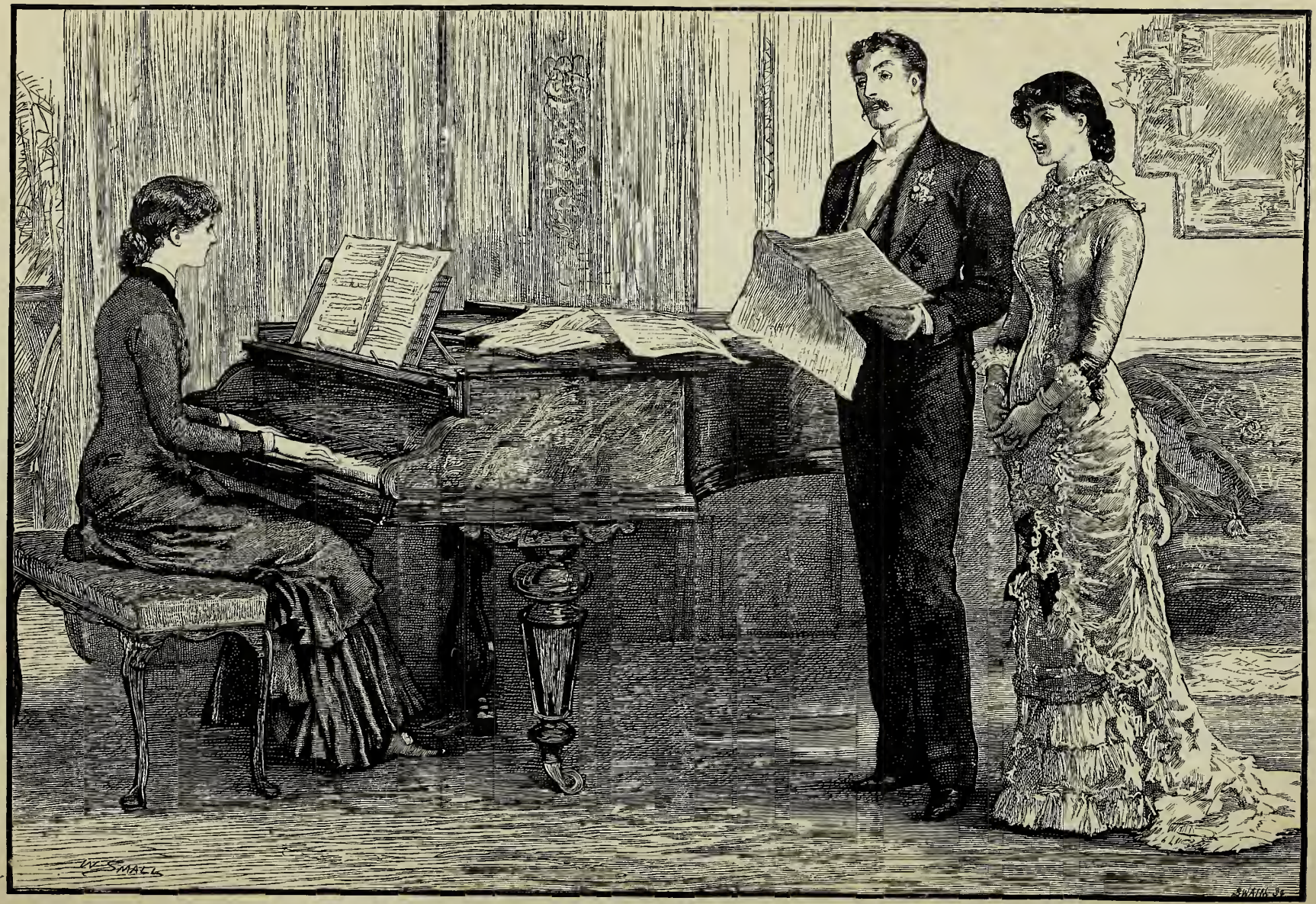
"You are very good, I am sure, but to-morrow you will be rewarded. There will be a shooting party and friends to dine, and then we must begin to think about Christmas."

The door opens, and Dolly comes in.

"He is fast asleep," she says to Lady Travers, as Geoffrey rises and gives her his chair, whilst ensconcing himself next to her.

"How you do fuss about Ferdie!" says Rose. "Fancy, Geoffrey, how she spoils that boy. She sings him to sleep every evening."

"Rose, dear," interrupts her mother, "Ferdie is ill, you know." And Dolly gives a feeble little laugh, and says she always intends to spoil Ferdie.



"ROSE AND GEOFFREY ARE TRYING OVER NEW DUETS TOGETHER."

"Will you sing to me?" asks Geoffrey, suddenly turning his quick grave glance on her.

"Please, not to-night," she answers; "another time. But I could not sing to-night; I am rather hoarse."

"I will sing to you, Geoffrey," says Rose, rising and advancing to the piano. "Won't that comfort you?"

"You have no idea," says Lady Travers in a stage whisper, "what a wonderful voice Rose has. Lord Marsland said it was marvellous for so young a girl, and such execution! His opinion is worth having, I assure you, for he is a thorough musician, and goes to concerts pretty nearly every night of his life when he is in town."

"Yes?" says Geoffrey. "I know Lord Marsland."

"No! Do you? Why did you not say so before? Is he not charming?"

"That depends on what you call charming." And there is a twinkle in Geoffrey's eye that Lady Travers fails to notice. There is no doubt that Rose has a powerful voice and brilliant execution, as testified in the very first bars of the elaborate Italian bravura song she commences, but it is beyond her powers, and trying to Geoffrey, who has heard it well rendered at most of the concert-rooms in Europe. Lady Travers rises to write a little note about nothing to Lord Marsland, and Geoffrey and Dolly are left alone by the fire-side. Quite silently they sit for awhile, staring at the red-hot coals, absorbed in their own thoughts, whilst Rose sings on and Lady Travers' pen scratches over the paper. Suddenly Mr. Ingram turns to his companion.

"Do you remember the tableaux here two years ago?" he asks.

"Yes, quite well."

"And that you told me you should begin German at once?"

"Yes."

"Did you do so?"

"Yes. I began it the day you left, on the Monday morning."

"Ah!" There comes to him a recollection of a little worn German Testament taken out of a drawer, and replaced there: of a wistful wondering look as he bade her good-bye: of suspicion and regret, and a resolve to forget the sweet child-face. Again he gazes fixedly at the coals, but Dolly continues—

"I am quite fluent at German now. I often read it to Ferdie; he is so fond of it."

"*Mährchen*, I suppose?"

"Not many of them, except Hans Andersen, and his he is never tired of; but as a rule he is far beyond *Mährchen* now." And Dolly's face grows grave and sad.

Geoffrey stoops forward, till his hand touches her dress and his dark hair is in close proximity to hers.

"Did Sir George——" he commences, and breaks off suddenly. "Why, Rose, you have left off singing," he says, looking up at the girl, who has abandoned the piano and advanced to the fire.

"I am tired," she answers curtly and significantly, but allows herself to be mollified when the two delinquents who have been talking humbly beg her pardon, and Geoffrey proceeds to take his place by the piano, leaving Dolly to knit and think by the fire. In the distance she hears the two disputing over the manner of rendering some passage in a well-known song, and somehow certain that he is right, smiles to herself as she recalls every word of that talk at the round table on the night of the tableaux, which, strange to say, neither he nor she seems to have forgotten. She hears her name called, and looks up as Geoffrey appeals to her for confirmation of his opinion.

"Dolly knows nothing about it," pouts Rose, with a little contemptuous smile curling her lip.

"It is not a case of knowing the song—which I happen to know extremely well—but of singing correctly or incorrectly, and therefore"—with a smile—"I appeal to Miss Travers

"Dolly is such a judge!" sneers Rose.

"Exactly. It is on that account I have troubled her for her opinion."

"Oh, Geoffrey, you are too amusing!" And Rose leans back in her chair, overcome with affected merriment.

Dolly looks at the passage in question, and conscientiously agreeing with Geoffrey, is loth to say so, as Rose's singing is a very tender point with her. The difficulty, however, is solved by Geoffrey sweeping away all the music, and begging for his dear German "*Lieder*," and soon Dolly is at the piano, playing accompaniments, and Rose and Geoffrey are trying over new duets together, with rather a melancholy result to the listeners, but with much satisfaction to themselves, till Sir Augustus comes in, and tea is succeeded by billiards.

As Dolly stands by the long green table, dreamily chalking her cue, she wonders if it is possible that this can be the house where to-day the sentence of death has gone forth, if she can be the girl who to-day was told she was to lose the child she loves so dearly, the child who has made home a home to her. Her mother's warm, generous nature is hers: she is no Travers; and as she looks round, and sees her stepmother laughing and talking to Rose, notes a smile on even Sir Augustus's countenance, a feeling of indignation against the world, herself, against every one, rises in her, and makes her long to throw down her cue and go and shut herself up with her darling. Her eye, as it sweeps round, lights at last on Geoffrey, who is gravely standing by the table, waiting to begin, and a sense of repose and trust steals over her—a sense that the world is not utterly bad and false, and that she has probably been unjust, and must not give up her place, as she longs to do, but play with the rest, rather than put herself forward as thinking more of Ferdie than the others.

So they commence their game, and she plays brilliantly, and wins solemn applause from her father and warm commendation from Geoffrey, till the hour arrives when she may legitimately go up to her boy and turn all her thoughts to him. Geoffrey gives her her candlestick in the hall, where they are alone, for Sir Augustus and his wife and daughter are discussing the morrow's programme over the billiard-balls.

"Miss Travers," he says earnestly, looking at the

wistful face, and noting how thin it has grown, "you must not overdo yourself even now. You must husband your strength, and be sure and take air and exercise every day; and if you will do me the honour of riding my horses, they are entirely at your disposal. I am very interfering, am I not?" he continues, with a smile, "but that is the special privilege of an old family friend."

"You are very kind," responds Dolly, restraining a sudden rush of tears to her eyes; "and I promise you I will not knock myself up." And with a warm hand-clasp she has bidden him good night, and is disappearing fast up-stairs.

"Poor child!" he murmurs to himself. "It is all thrown on her shoulders, and no one would care if she never stirred from the child's side——Here I am, my lady," in answer to Lady Travers' call, "ready to fight Sir Augustus."

"Oh, Harry, Harry!" cries Dolly, as she shuts her room-door, "where are you? Why do you not come to me?"

END OF CHAPTER THE SEVENTEENTH.

ROSES, AND HOW TO GROW THEM.

BY A PRACTICAL AMATEUR.



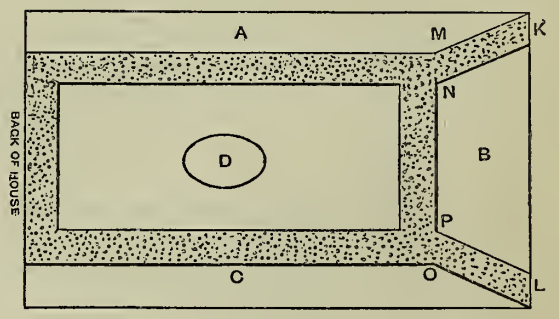
ROSE-CULTURE as a recreation cannot be too highly extolled, especially to any one who is daily engaged in sedentary pursuits. The "queen of flowers" is an object of delight to every lover of nature, and this delight is increased tenfold when we can grow this "thing of beauty" for ourselves. The rose may be grown to perfection by any amateur who cares for its cultivation, by attention to a few details, which can be very easily carried into effect.

The first thing to be considered is a suitable soil and situation. A clayey soil is the natural home of the rose, and the purer the air the better: hence, dwellers in the immediate vicinity of cities and large towns must not expect to succeed so well as those who live in the country; nevertheless, even the townsman can grow splendid blooms, provided he make a judicious selection—*i.e.*, attempt to cultivate *none but roses of a hardy habit;* and happily there are a great number of that kind, including several of the finest exhibition varieties, in cultivation. The suburban amateur should not spend money, time, and trouble by attempting in vain to grow roses of delicate constitution.

Now to enter into our subject in proper order. We will first give practical instructions for the

Arrangement of the Rose Garden.

Let us take for an example an ordinary villa or cottage garden (see the figure). D is the lawn or central grass plot, which, if not used for croquet or tennis, may advantageously contain an oval bed in the centre and a crescent-shaped or round bed at each end. A, B, and C are borders, and the walks are shaded. A beautiful display of roses might be produced in such a garden by planting tall standards to border the lawn, in the centre of each lawn bed, and in the back part of border B; dwarf standards on the Manetti brier or bush roses at equal distances in borders A and C, and in the front part of border B; and climbing roses on galvanised iron arches spanning the walks at M N and



O P, and, if desired, to cover the wall, K L. Rockeries at K and L, containing hardy ferns, would greatly add to the beauty of the garden, and if the lawn beds are bordered with pyrethrums and blue lobelias, planted alternately, the effect will be particularly pleasing. Now with regard to the

Preparation of the Soil.

The following details must be thoroughly carried out in order to make rose-culture a success. The soil for roses should be rich, porous, and moderately heavy. If it be stiff clay it must be made friable, and fertilised by a dressing of fresh-burnt lime; the contents of the ash-bin will also be particularly useful to lighten it and render it porous. Lime need not be used for ordinary garden loam. The soil should be twice dug. First, dig the ground all over to a depth of at least two feet, carefully pulverising it. Set this soil up in two ridges to the depth of the digging, and let it remain so for a few days.

Before going over it a second time, strew between the ridges old stable or cow-shed manure and sand, or road-sweepings, or, what is better still, if available, the ashes of a "smother" (*i.e.*, garden bonfire), in equal quantities. Having done this, fork down the ridges, work the compost well together, and tread the ground firm. This is, of course, applicable to the borders; but supposing the amateur desires to grow standards round the lawn, he must remove the turf in each place where a standard is required (the spaces between them should not be less than five feet), in a circle of about five feet in diameter, prepare the soil as directed above, and in replacing the turf, a circle of at least two feet in diameter should be left open. This is important, for standards never thrive as they might *when the turf is laid up close to the stock*. It should be stated that before the turf which has been removed is re-laid, the top soil should be covered to a depth of, say, two or three inches with any poor soil, or a mixture of garden mould and ashes, in order to prevent the re-laid turf from growing too luxuriantly; but the open space should be filled with a good rich compost of old manure and garden mould, which the rain will wash down to the roots to enrich the plant.

Now, having prepared the soil, the next thing to do is to make a

Selection.

In this matter the amateur must beware of the specimens exhibited at rose shows, because they are mostly grown under glass, and if not produced thus, are the outcome of horticultural skill and advantages with which he can rarely compete. He would do well to note the roses grown in his district, in gardens, nurseries, or cemeteries. A respectable neighbouring florist will supply him with much useful information. From the many hundreds of roses in cultivation, the list here given contains none but those which are perfectly hardy, and which we can conscientiously recommend to the amateur rose-grower.

I.—Standards on the English Brier.

(*a*) *Darkest—Purple, Dark Crimson*, and *Bright Crimson.*—Antoine Ducher, Charles Lefebvre,* Gloire de Ducher, Louis van Houtté,* Eugène Verdier, Prince Camille de Rohan,* S. Reynolds Hole.

(*b*) *Red—Crimson* and *Carmine.*—Alfred Colomb,* Annie Wood, Docteur Audry,* Baron Haussmann, Général Jacqueminot,* Lord Macaulay, Gloire de Santenay, Madame Victor Verdier,* Marie Baumann, Sénateur Vaisse,* Rev. H. Dombrain, Duchesse de Caylus.*

(*c*) *Light Red—Light Crimson* and *Bright Rose.*—Bernard Palissy, Beauty of Waltham, Glory of Waltham, Edouard Morren, Jules Margottin,* Madame de Cambacérès, Madame Domage, Marquise de Castellane, Victor Verdier,* Marie Rady, Paul Neron,* John Hopper,* A. K. Williams.*

(*d*) *Pink—Dark* and *Light.*—Abel Grand, Baroness Rothschild,* Baronne Prévost,* Elie Morel, Lyonnais, La France,* Marguerite de St. Amand, Captain Christy.*

(*e*) *Tinted White.*—Mrs. Rivers, Miss Ingram, Princess Mary of Cambridge, Souvenir de la Malmaison.*

(*f*) *Pure White.*—Madame Lacharme,* Perle des Blanches, Boule de Neige.

(*g*) *Tea-scented.*—Gloire de Dijon,* Perle de Lyon,* Madame Ducher, Cheshunt Hybrid.*

(*h*) *Noisette.*—Aimée Vibert,* Celine Forestier,* Maréchal Niel, Rêve d'Or.

Out of the fifty roses above mentioned the amateur may want to select twenty-five. Let him choose the ones marked with asterisks, and if they are properly attended to, he will have a garden made perfectly delightful with typical blooms of the very best kinds in cultivation. The lot would cost about thirty-five shillings.

II.—Dwarf Standards on the Manetti.

The Manetti is an Italian brier, noted for its hardy, free-growing nature. It will thrive on the poorest soil, and serve admirably for perpetuals of a robust habit, such as *Victor Verdier, Charles Lefebvre, Jules Margottin, La France, Baroness Rothschild, Docteur Andry*, &c. Standards on the Manetti are very advantageous to the amateur for the rapidity of their growth, and we shall give instructions in the paragraph on planting how to convert roses on the Manetti into *own-root roses*, which will last a lifetime, and become more beautiful and luxuriant every season. Thus we strongly recommend every rosarian to cultivate Manetti roses. They may be purchased, established in pots, at a shilling each.

III.—Bush Roses.

Amateurs should specially cultivate Bush Roses, for they may be made to form objects of dazzling beauty when well arranged and suitably pruned. In such a garden as we have planned above they might be planted in the borders A, B, and C, alternating with dwarf standards, at equal distances of, say, five feet apart. The *Provence, Cabbage, Moss, Evergreen, Bourbon, China*, and *Damask* roses are all suitable for this purpose; but it should be remarked that it is useless to attempt growing Moss roses in the neighbourhood of cities or large towns, pure air being imperatively necessary for their growth. Provence and China roses also will not thrive in a smoky atmosphere. For this reason the Common China often bears the name of the "Pilot Rose;" for if the rosarian can grow it satisfactorily in his garden, he may with safety plant out Teas and Noisettes. We append the names of a few choice kinds which can be thoroughly recommended:—EVERGREEN (*R. sempervirens*): so called because its beautiful dark foliage grows on to the winter months: *Rosea major* (rose and flesh-tint); *Félicité perpétuelle* (flesh and cream-tint); *Carnea grandiflora* (pale flesh-tint, double); *Triomphe de Bolwhyller* (beautifully fragrant); *Banksæflora* (shades of cream and yellow); *Donna Maria* (pure white; very beautiful). BOURBON: *Sir Joseph Paxton* (rose, with shades of crimson); *Bouquet de Flore* (beau-

tiful carmine, profuse bloomer, and vigorous grower); *Mrs. Bosanquet* (white and cream-coloured; a profuse bloomer during summer and autumn; a delightful garden rose). CHINA: *Marjolin* (dark crimson); *Prince Charles* (bright carmine); *Madame Breôn* (rose-tint); *Eugène Hardy* (a beautiful pale blush); *Clara Sylvain* (white; large blossoms). DAMASK: no garden should be without the *Damask Perpetual*. Planted in a mass, they will form a splendid show of brilliant colour for the autumnal months.

IV.—Climbing and Pillar Roses.

Hanging in festoons over a sitting-room window, covering arches or arbours in the garden, or decking an otherwise uninteresting garden wall, climbing roses are very delightful to behold, and, happily for the amateur rosarian, the cultivation and management of the hardiest and most beautiful kinds are perfectly simple.

The Ayrshire Rose is one of the best climbing roses known, for it will grow in almost any soil, and its growth is so rapid that it will cover a large space in one season, especially if planted in good rich soil. It is a pendulous rose, and is admirably suited for growing over windows or balconies. It forms a beautiful object as a "weeping standard" in the garden. The following are recommended:—*Splendens* (a creamy-white and flesh-tint); *Ayrshire Queen* (a rich purple-crimson); *Alice Grey* (salmon and cream); *Ruga* (a delightful hybrid between an Ayrshire and a Tea; pale flesh-colour; exceedingly fragrant); *Queen of the Belgians* (cupped and double; white and cream tint; very fragrant). Price, in pots, one shilling each.

For *Wall-roses*, the well-known Teas, *Gloire de Dijon*, *Cheshunt Hybrid*, *Perle de Lyon*, *Madame Ducher*, and *Niphetos*, and the Noisettes, *Lamarque*, *Celine Forestier*, *Maréchal Niel*, and *Triomphe de Rennes* are particularly suitable. *Gloire de Dijon*, *Cheshunt Hybrid*, and *Celine Forestier* are



exceedingly vigorous, and will even bear the smoke of towns. They will cover the side of a house in about four seasons. Now that we have given the amateur ample room for selection, we shall give a few necessary hints on

Planting.

For standards on the English brier, October, November, and February are generally considered the best months for planting. The roses planted in October or November come from the open ground; those planted in February have been housed and established in pots ready for sale. We will suppose that the amateur has prepared the soil as directed, and bought his rose-trees. He should now mark off distances of five feet along the beds and lawn, and appoint a place for each tree (arranging the colours to suit his own fancy). In each place a hole should be dug, two feet square and two feet deep. Into each hole a spadeful of well-rotted cow-dung should be put and well worked up with the removed soil, filling the hole up to about six inches from the top; on this the roots of the tree should be spread horizontally, then the soil should be filled in and trodden down hard and firm until it forms a layer four inches thick above the roots. Here a word of caution is necessary. It is very important that the soil should be trodden down as hard and firm as possible, for unless this be done the trees will not thrive. "*Mulching*" is the next operation, *i.e.*, spreading a layer of cow-dung two inches deep around the base of each tree, and plentifully watering through it to settle the earth about the roots. This coating of manure will preserve the trees during the winter frosts, and should be left until March, when it might be forked into the soil. In watering, the ground should be thoroughly soaked night and morning for a day or two, then left for a week, when the soaking should be resumed; a mere watering of the top soil every day does more harm than good. The trees should next be staked.

For standards on the Manetti, bush roses, and climbing roses, the latter end of April or the beginning of May is the best time for planting; if the weather is fine and open, towards the end of April is to be preferred. In a former part of this paper we strongly recommended the amateur rosarian to grow Manetti roses, as they may be converted into *own-root* roses. This is effected by the mode of planting. The Manetti brier is particularly liable to throw up suckers, which, if not checked, will sadly impoverish the roses borne upon it. This may be prevented by nipping off every little incipient bud from the stock below the graft before planting, and by planting the tree sufficiently deep for the top soil to be two inches above the graft. By so doing the rose will put forth roots of its own at its junction with the Manetti stock, and as they grow strong the old stock will die. There are two advantages thus gained: each sucker thrown up by the own-root bush will be an additional rose-tree, and in the event of a severe frost, should the shoots be killed, the tree will be renewed again from the roots. In planting Manetti roses, the ball should be removed from the pot entire. After treading the ground firm about them, they should be mulched and copiously watered. With the exception of China roses, the other bush roses given in our selection may be planted as directed for standards on the English brier. China roses require the soil a little lightened, and this can be effected by adding to the compost recommended some sandy loam or road-dust and rotted turf; the rotted sweepings of the lawn would answer very well.

The next thing we have to speak of is

Pruning.

This is applicable to root as well as branch. The object in pruning the former is to favour the growth of new root-fibres or spongioles, for the roots feed chiefly by them; and the object in pruning the latter is to produce a well-formed head. Root-pruning is only necessary every two years for standards. They should be taken up very carefully in spring, while in a torpid state; the thick, coarse rootlets should be cut away with a sharp knife, and the trees replanted in a fresh compost: this will thoroughly re-invigorate them, and cause them to bloom profusely. March is the usual time for pruning the head, except in the case of Tea-scented, Noisette, and China roses, which should be pruned in the middle of April. It must also be observed that these roses "do not bear the knife well:" that is to say, they must be cut sparingly—one-third of each shoot being sufficient. In pruning the Hybrid Perpetuals, two-thirds of each shoot may be cut off—reducing the number of eyes to five or six, or to three if quality is more to be desired than quantity. Gardeners make it a rule that the stronger the shoot the less severely should it be pruned. All decayed and weak wood should be cut clean away, also shoots which grow cross or inwards. The cut in each instance must be made as close as possible to the topmost bud without injury to it. In pruning bush roses a beautiful effect is produced by allowing a strong central shoot to grow unchecked, nipping off its lower lateral buds until it forms a standard, then pruning the surrounding shoots to one-half the height of the central shoot: by so doing the tree in blooming time will form quite a pyramid of roses. The writer saw a bush of common cabbage roses pruned thus in a cottager's garden in Kent, and it was literally covered with blooms—an object of beauty, better seen than described.

When the rose-garden has been fairly started—the planting and pruning all done—it will be a pleasurable occupation to give it the little attention it needs. The watering must be given as directed, using soft water or fresh household sewage well diluted with soft water, from the time of planting to the end of July. For watering overhead use clean soft water, and apply it vigorously with a syringe. If this is done regularly it will save the trees from green-fly, and in the neighbourhood of towns it will serve to counteract in some measure the baneful effects of smoke and dust.

THE EMPLOYMENT OF GIRLS.



EVERY thinking person must have been struck by the wonderful revolution which has taken place during the last few years in the aspect from which women's work is regarded. The time has only just gone by when a lady shrank from undertaking real honest work, either of a domestic nature in her own home, or for remuneration out of doors, for fear of considerably damaging her social position in the eyes of the "polite" world generally.

Now a little reflection brings us to the fact that pride was at the bottom of this, as of so many other social evils. It was supposed that every one who claimed to live the gentle life must necessarily possess the wherewithal to be able to ignore work. We are not here speaking of occupation simply, for occupation does not necessarily mean work, but of really useful and defined employment, by which not only the worker, but those around her, and perchance some portion of the community at large, are benefited.

The key-note of reform has been unhesitatingly sounded by many distinguished champions, and work for women is now theoretically, and to a large extent practically, conceded to be a good thing. There are, no doubt, still existent some prejudiced minds who look upon remunerative work as detrimental to a girl's social position, but these are in the minority.

My object, however, is not so much to dwell upon the social position of lady workers as to insist upon the benefit, I might almost say necessity, of providing a girl with definite employment, whether it is to be followed as a means of livelihood, or for the sake of making her a useful, healthy, and happy member of society.

I am not prepared to follow the lead of some enlightened writers who declare that marriage is the sole aim and end of a woman's existence. A happy marriage is, without doubt, the brightest of all lots; but we know that a vast number of girls cannot marry, and as for every girl there is the possibility of coming among this number, it is simple cruelty to teach her to bend all her energies to this one point: to dress, to study, to attend places of amusement, aye, and even to go to church, in pursuit of this object. Such a course too often ends in misery; the girl looks upon her life as a failure; she thinks she is an object of pity, if not of contempt, for others have not been slow to note her actions; she is too soured and dispirited to take up work for its own sake, even if she be ever convinced that the time has arrived when she must abandon her hopes. Thus her best years are wasted in a mode of life which has enervated her system, deteriorated her character, and unfitted her for life's burdens. This may seem an exaggerated picture, but who cannot recall many parallel cases in his or her own experience?

I would therefore urge that a girl's education should be made to tend towards some point of usefulness independent of marriage. If she is not likely to require to maintain herself, then still let there be a definite object in her studies, so that when she leaves school she may not settle down to an idle, useless life, rapidly losing the knowledge she has taken such pains to gain. If her circumstances allow her to continue her studies, so much the better for her. She has trodden the difficult paths of learning, and there lies before her a vast flowery meadow, from which she may cull as many blossoms as she will.

But even though she continue to advance her own education, there is no reason why *all* her attention should be devoted to self-culture. It is time she should turn to account the stores she has gained. If she has young brothers and sisters, it would be a great thing for her to undertake some portion of their education, though I do not believe in this home teaching unless there is real ability in the teacher, and a firm determination that the work shall be carried on systematically. Children, as a rule, prove the fact that familiarity breeds contempt, and unless a girl has some aptitude for governing and organising, the task will be more difficult than the teaching of strangers' children.

But although many girls may have neither the opportunity nor the ability to assist in the education of the younger members of the family, there are still many paths of usefulness open to them. An able writer on employment for girls, in an interesting book lately published,* advocates strongly the management and performance of domestic work by the girls of a household, and this on the score of the benefit to their health as much as for purposes of economy, or the practical knowledge to be gained thereby. But I am quite of the author's opinion that a knowledge of domestic duties is not the sole end and aim of a woman's life. I would neither under-value nor over-rate their importance. Such knowledge is not only desirable, it is absolutely necessary in these days. Without it there is very little chance of comfort in the home, and the girl who marries without having gained it is in a pitiable case; for after all a girl's training must be said to have failed if it does not fit her for a married life, although this may not have been the only object in view.

That a portion of a girl's time should be devoted to

* "What Girls can Do." By Phillis Browne. Cassell, Petter, Galpin & Co.

these duties, is therefore clearly advisable. Mrs. Browne, in her excellent book, advises that every girl should be made responsible for the entire work of her own bed-room, with the exception only of window-cleaning. Whether the time might not be more profitably spent in looking after the general orderliness of the house, cooking, marketing, attending to the household linen, &c., than in such occupations as blacking stoves and washing hearths, is a matter of individual opinion; but I would urge that whatever work of this kind a girl undertakes, she should do it neatly and well, cultivating the knack of preserving her own spotless, tidy appearance, for in this art lies the principal secret of performing such duties without derogating from her own ladyhood. Short dresses, useful aprons which may well be pretty ones, and gloved hands should be the rule for all work of this kind.

Two hours a day is an ample proportion for girls to give to household duties, unless there is any special demand upon them. In this proportion such work is eminently useful. It affords exercise, it is a relief to mind and brain, benefits the household generally, and trains the girl to become an efficient mistress in her turn.

But a girl's work ought not to stop here, no, nor even with the manufacture of her own apparel, which is a very desirable point. It is a disgrace to a girl not to be able to use her needle, and there are few women who are able to dispense with a skilful use of it, yet a girl's time is obviously wasted in cultivating an elaborate mode of producing useless articles, when the same time spent in another way will produce really useful and lasting results. So-called "fancy work," especially that of an artistic nature, is well adapted for beautifying a home, but it should be the graceful employment of leisure hours, a relief from more severe undertakings, a means of gathering up the fragments of time, that nothing be lost. Of the more sober and useful kinds of work there are so many within a girl's range, that I cannot hope to speak at all fully about them in the compass of one short paper, but I cannot do better than refer my readers to the book I have already quoted for full and practical information on every aspect of this important subject.

If a girl has no actual need to work, or indeed if she be happily blessed with a greater provision than her own carefully regulated necessities demand, she is in the enviable position of being able to assist others with her time. Trained workers among the poor are urgently needed; indeed, any minister of religion will tell how his hands might be strengthened if he could only obtain the services of efficient, *i.e.*, trained helpers instead of the well-meant but often useless assistance of those who have an excellent will, but very little knowledge of what is required. Real hard work is required of those who train as sick-nurses, but it is an inestimable boon for a girl to receive such training, even if she does not take it up as a profession. Perhaps no work is more interesting and useful than the formation and superintendence of crèches in poor neighbourhoods. These institutions afford real help without exerting the demoralising influence of indiscriminate charity, and are especially adapted to interest girls who are fond of little children, as the majority are. Sunday-school teaching is no easy work if properly performed, a careful preparation being given to each lesson. There are plenty of modes of work open to those girls who have time and money, but these are comparatively few.

Many girls, if not absolutely compelled to work for a livelihood, are extremely glad of the extra comfort and refinement remunerative work would be the means of bringing them. And there is no reason why they should not work for gain. There is no such inducement to thoroughness in our work as having its merits gauged by impartial critics.

A girl who possesses artistic talent has a tolerably large field open to her if only she will work hard and earnestly. No work can be taken up without special training, and the reason why so many fail is that they fancy talent is all that is needed. This is the most fatal mistake. Talent is very necessary, but unless it be guided and developed it is worthless for the purposes of remunerative work. It is for this reason that a girl's general education should be made to tend towards some given point, from the earliest moment that any special talent displays itself. Thus, if a child show signs of artistic talent, every endeavour should be made to cultivate that talent and attain excellence in some branch of it, not by any means neglecting the general education, but taking care that it is conducted in such a way as to strengthen and foster the special gift.

There is so great a demand in these days for artistic work of all kinds that excellence in this branch must meet with success, but excellence is required, and that is only to be had by diligent cultivation. Of course that worker has the best chance who can originate. Designs of all sorts are in daily requisition. The painting of Christmas, New Year, and birthday cards, designing book-covers, designs for pottery, for art needlework, and many other articles, keep vast numbers of women and girls in daily employ. Magazine illustration too is largely entered into by lady artists, and it is a fact that those who are really proficient in the art have more than enough work, but without a severe training and technical knowledge of details, no one however clever can hope for employment. For the right quarter in which to seek such training, the length of time required, probable cost, &c., I would refer my readers to a most useful book on this subject, entitled "How Women may Earn a Living," by Miss Grogan, published by Messrs. Cassell, Petter, Galpin & Co.

There is at the present moment a large demand for skilled teachers in all subjects, but here again it is the well-trained proficient workers who carry the day, leaving the unqualified instructor to gain but a scanty subsistence in return for the greatest drudgery. I would strongly advise girls who intend to take up teaching as a profession to go in for special subjects, endeavouring to make themselves exhaustively acquainted with these *rather* than be satisfied with a poor average all round. Of course, if they can take

up two or three subjects in this way, they have the greater advantage, but a high standard of excellence is becoming more and more the demand of the day, and she who would command success must keep her eyes open to the requirements of the times. I know a lady who has her time fully occupied with literature classes in schools, her sister is making very fair way in the teaching of elocution, while yet another sister has more than she can do in preparing candidates for local musical examinations, for which she is well qualified. In all appointments that are worth having, there is no such acceptable reference as a certificate from one of the recognised examining bodies. Indeed it is extremely difficult to obtain remunerative teaching without one of these patents of ability, which are now placed within the reach of all. I may add that the demand for properly trained and certificated Kindergarten teachers is in excess of the supply.

The other remunerative employments open to girls, such as post-office and telegraph clerkships, all imperatively demand the preliminary course of efficient training. The system of open competition is to be applied to these appointments, rendering the special preparation more than ever necessary. Of the medical profession, it is needless to say that very hard work and determined perseverance will alone compass the training required.

We find therefore, on investigation, that many more spheres of work are open to girls than there were in bygone times, and that as a natural result there are more workers than there ever were. The inevitable tendency of this state of things is to depreciate the value of the incompetent, and leave the prizes in the hands of those who are most qualified to hold them, and indeed it would be well for girls to remember that their claim for remunerative work can only be established by their proved ability to perform it.

M. B. H.

A "JAM OF LUMBER" IN NEW BRUNSWICK.

BY PROFESSOR J. P. SHELDON

A SCENE of unique and singular strangeness was witnessed last October by a number of visitors at Grand Falls, about 150 miles up the noble river St. John. It must be understood that the "lumber-men" of the great Canadian forests frequently depend entirely on floating their logs down the rivers to the saw-mills below, and in some cases the trees are water-borne in this way many scores of miles, no other system of carriage being practicable. The logs are cut in the forests and hauled to the river's bank, when they are floated along on the crest of a freshet. Last autumn a vast number of them were waiting in the upper part of the river, held there by booms to which they were moored; but the saw-mills were almost idle, and as the owners wanted the logs to go on with, orders were given to cast them adrift without waiting for a rise of the water. But the number of logs waiting was enormous, and the water was sinking rather than rising, hence the "jam" which we shall presently describe.

At Grand Falls, the river St. John has carved a deep, long gully or channel through the dark igneous rock, whose steep sides are crowned with pine and spruce and lignum vitæ, forming wild and beautiful scenery. The channel is some 80 to 100 feet deep, by 150 to 200 feet wide, forming curves and bends and sweeps, of wild and weird beauty, which is very striking when the splendid autumn tints have covered the forests. The scenery generally in this district is very fine, and the Grand Falls are indeed beautiful, an enterprising American hotel-keeper advertising them as "Niagara Surpassed!" They are, however, far enough behind Niagara in magnificent and awe-striking splendour, but they are worth going a long way to see.

The annexed illustration, from a photograph taken on the suspension bridge, gives an excellent view of the gully, and of the jam of logs, which nearly obliterates the falls. The jam, indeed, is not even half given, for it extends a quarter of a mile or so below the bridge, but the portion seen gives a good idea of the rest. It was estimated that the jam contained no less than twenty-seven to thirty million cubic feet of timber, and it was blocked up there firmly, with the river surging and swirling beneath it, though breaking through in places, forming masses of foam and froth discoloured by the sap of the timber. The logs, some of which were very large, were piled up in all sorts of grotesque attitudes, some of them being nearly on end and trembling and nodding to the play of the torrent beneath; others were thrown high up against the rocks, which they butted in savage impotence; and for the most part they were piled on each other five or six deep, completely obscuring the water.

On the 20th of October, a party of gentlemen, of whom the writer was one, were paying a visit of inspection to the new Danish settlement in that part of the province, and took the chance of looking at the jam of logs, the like of which has not been seen before and probably will not again. Actuated by the love of dangerous adventure which seems to be a part of the Anglo-Saxon nature, the party decided to make a tour of the logs. Starting at the bottom, they carefully threaded their way over the damp, slippery

timber; many of the logs were loose, offering a treacherous foot-hold, and others were scaled at the risk of broken limbs. The progress was slow, but it was cheered by the emulation of companions, and encouraged by those who looked down from the banks. As the falls were neared, the journey became more difficult and dangerous, because of the blinding clouds of spray which rose from the cataract; the logs were slimy with wet, while they quivered in response to the force of the descending water. Going up the face of the falls, with the logs in extraordinary positions, and the water seething and hissing through the spaces amongst them, was an achievement requiring nerve and great care, for a false step would probably have extinguished a life. Out over the top of the falls the logs were loosely lying in still water, sinking and turning under one's feet, but there was no retreating the way we had come. Fortunately the logs reached to the shore, and it was a matter of great delicacy to step on them safely, but eventually the whole party reached the bank in safety, receiving a hearty cheer from the many onlookers who had gathered around.



A "JAM OF LUMBER."

A few hours later a swell of the river moved some of the logs, so that the feat could not again have been done.

The party alluded to consisted of several members of the Provincial Government, two or three officials, and one or two other gentlemen. It was said that the adventure might easily have had important political consequences, involving a change of Government, and the party were warmly congratulated on the safe termination of a somewhat rash undertaking.

A HOLIDAY VISIT TO PENSHURST.



THE pretty village of Penshurst is built in the midst of trees, which overshadow its picturesque cottages and screen its fine old church. The situation is elevated, and hence the origin of the name, "pen" being an old British word for height, and "hyrst" meaning a wood. At one time it was called Penchester, from the vicinity of a camp or fortress, probably Penshurst House in the days of its first inhabitants.

The chief interest of Penshurst is naturally centred in this ancient house, the home of the Sidneys.

> "Thou art not, Penshurst, built to envious show
> Of touch or marble, nor canst boast a row
> Of polished pillars, or a roof of gold.
> * * * An ancient pile,
> Thou joyst in better marks of soil, of air,
> Of wood, of water, therein thou art fair;
> Thou hast thy walks for health as well as sport,
> Thy mount, to which the Dryads do resort."

Penshurst House is an assemblage of irregular buildings bounded by a general square outline. The dimensions on the north front are immense, and in the Tudor style. There is a fine entrance, but it has been spoiled by those Italian dressings that were introduced about the time of Elizabeth. Part of the buildings to the left of this entrance have been taken down, and the materials carried to Tunbridge, where it is said they are re-constructed into a dwelling-house on the old plan. The west front is divided into five large parts, also Tudor disfigured by innovations. The central erection projects beyond the rest, and was probably intended for a chapel. Its proportions are plain, and it appears to be of an older date than its surroundings. On the south is a variety of square and octangular towers, buttresses, and battlements, which have suffered materially from the taste of its owners in the time of George II. The same diversity is presented by the eastern front, but here its picturesque effect is fortunately unmarred by any *improvements*. The parterres and terraces lie on this side of the mansion, and at some distance from the main building stands a large square tower, formerly one of those intermediate outworks which at certain distances served to connect exterior defensive walls.

The fortified house of Penshurst is said to have existed before the advent of William the Conqueror. The family who resided in it when the survey for Domesday was taken, were called Penchester, and the estate appears to have been handed down from father to son until the time of Edward I. Sir Stephen Penshurst, or Penchester, possessed the property in the beginning of this reign. He was knighted by Henry III., made Constable of Dover Castle, and Warden of the Cinque Ports, which offices he retained after the accession of Edward I. Upon the death of his widow, the manor of Penshurst was divided between his only children, Joan and Alice, who do not seem to have had a great affection for the place, for shortly after they came into possession they and their husbands assigned it to Sir John de Pultney, a rich citizen of London.

Sir John de Pultney was remarkable for his wisdom, piety, and benevolence, as well as for his great wealth. King Edward III. held him in high esteem, and he was four times elected Lord Mayor of London. His acts of public charity and munificence were innumerable. He founded the church of St. Lawrence Pountney, where he was buried, the church of Little All Hallows, in Thames Street, and a chapel or chantry to St. Paul's Cathedral.

Penshurst is supposed to have been much improved and enlarged by Sir John de Pultney. He had licence to "crenellate" or fortify it from the Crown, and the decorative work of the great hall is of his time.

This hall, the most important feature of the original house, is almost unaltered. A writer in the *Gentleman's Magazine* for December, 1805, describes it thus: "The entrance is on the north side, through a porch flanked with an octangular tower. Above the windows are receding arches, the whole design set forth with butterflies and embattled. The tracery to the window over the porch is most beautiful, and by the remnants left of the tracery of the windows of the hall, they must have been most exquisite. It is painful to observe these latter traceries have been cut away in part to introduce the clumsy sash-frames, *temp.* George II., and the lanthorn in the roof of the hall has been at the same period modernised into a bell-turret. At entering into the hall, directly above the head is the minstrels' gallery. On this side of the hall is a double archway, leading to the kitchen and buttery, &c. The front or screen of the minstrels' gallery is richly finished, and in many of the open compartments are placed wood-carved figures, originally put up as supporters to the springings of the timbers of the open-worked roof. Against the wall above the gallery are hung various armours and weapons made in the time of Elizabeth. Among them is a suit of armour worn, as it is said, by Sir Philip Sidney when he was killed in Flanders. This famous relict of heroic adornment," adds the writer indignantly, "is foully disgraced by having attached to the knee-pieces a pair of jack-boots, *temp.* William III." He also complains of the

"shamefully neglected" condition of the whole collection, which he says "is suffered to be purloined away piecemeal," and in conclusion he hurls a dart at the bad taste which permits a scenic painting representing a continuation of the hall to be hung at the upper end. This painting is now removed, and the present owner of Penshurst, Lord d'Isle, has done all in his power to restore the hall and rearrange the armour and weapons of his ancestors.

There is a descent from the hall into a crypt which was probably built in the days of the Penchesters. It consists of a double aisle divided by columns, which support arches and groins. The proportions are perfect, and the masonry is still unimpaired by decay. There is also an ancient stone staircase ascending in an octangular figure, with fine tracery in the windows.

On the decease of Sir John de Pultney, Penshurst passed to his son William, who died a few years after he attained his majority. It was then conveyed by the trustees to Sir Nicholas Lovaine, second husband of Lady de Pultney. Their son Nicholas was the next possessor, and he had no children. After his death, his widow Margaret, the eldest daughter of John de Vere, Earl of Oxford, remained at Penshurst, and took for her second husband Sir John Devereux, the first of that name who was created a peer. He was distinguished for his military achievements in the reign of Edward III. and Richard II. Both of these kings loaded him with honours, and the latter gave him permission to improve the battlements and fortifications made by Sir John de Pultney in his manor-house of Penshurst.

When Lady Devereux was dead Penshurst became the property of Margaret Lovaine, the sister and heiress of her first husband. She was twice married: first to Richard Chamberlayn, of Sherburn, in Oxfordshire, and secondly to Sir Philip St. Clere, of Aldham St. Clere, Ightham, both of whom seem to have held the manor of Penshurst in the right of their wife. The son of the latter inherited the estate, and sold it to John, Duke of Bedford, Protector of England during the minority of Henry VI. On his death Humphry, Duke of Gloucester, became his heir. He died without issue, and the king, his nephew, was found to be his next of kin.

But the manor of Penshurst did not long remain the property of the Crown. It was granted the same year to Humphrey Stafford, Duke of Buckingham, as a recognition of his services. He was slain at the battle of Northampton, and his son, a child five years old, inherited his title and estates.

This young Duke of Buckingham was afterwards active in the promotion of Richard III., but ultimately he deserted that king to support the claim of Henry, Earl of Richmond. Unhappily he was made prisoner by his old master, who showed him no mercy. He was taken to Salisbury and beheaded without even the show of a trial. The son, who succeeded to his titles and estates, suffered the same fate. He was accused of a conspiracy to take away the life of Henry VIII., and executed on Tower Hill. His eldest son Henry was generously allowed to assume his father's title, but his inheritance was made forfeit to the Crown.

Four years after the accession of Edward VI., Penshurst was granted to John, Earl of Warwick, but he shortly afterwards returned it in exchange for other premises. Sir Ralph Tane then held it by knight's service, but his interest in the affairs of the Duke of Somerset brought him to the gallows before he had been master of Penshurst two years.

It was immediately conveyed by the king to a gentleman of his Privy Chamber who had honourably filled several offices of importance in his household. The translation is recorded over one of the principal gateways in the following inscription :—

"The most religious and renowned Prince Edward the Sixt, Kinge of England, France, and Ireland, gave this house of Pencester, with the manors, landes, and appvrtenaynces there vnto belonginge, vnto his trvstye and welbeloved servant Syr William Sydney, Knight Banneret."

The venerable Sir William died at Penshurst a few months after his royal master, and his son Sir Henry took possession of the old mansion with his bride. He had just married the eldest daughter of the Duke of Northumberland, but prudence prevented his participation in the ambitious designs of his father-in-law. The tragic deaths of his wife's relations disturbed the tranquillity of his seclusion at Penshurst, but he managed to escape without suspicion, and was afterwards elected a Knight of the Garter, admitted to the Privy Council, and made Lord Justice of Ireland four times. He died at the Bishop's Palace at Worcester, and Queen Elizabeth had his body conveyed to Penshurst for interment, but his heart was sent to Ludlow, in Wales.

The eldest son of Sir Henry Sidney was the celebrated Sir Philip. At the time of his birth Penshurst was a house of mourning. The blood of his mother's relations was scarcely dry upon the block, and the corpse of her brother, John Dudley, had only just been carried out of the grand porch. With strange and mingled feelings Sir Henry Sidney must have gone forth to plant the oak which was to commemorate the birth of his son.

Sir Philip Sidney's youth was spent at Penshurst, amid the scenes which he afterwards described in his "Arcadia." When he was old enough he was sent to Shrewsbury, and from thence to Oxford. At eighteen years of age, in 1572, he went to Paris, and after three months' sojourn was a witness of the terrible tragedy of St. Bartholomew's from the house of Sir Francis Walsingham, the English ambassador. During his stay abroad he made the acquaintance of Hubert Lanquet at Frankfort. Sir Philip records the influence on his after-life of this celebrated man in the following lines :—

"The song I sing old Lanquet had me taught—
Lanquet the shepherd best swift Ister knew,
For clerkly reed, and hating what is naught,
For faithful heart, clean hands, and mouth as true;
With his sweet skill my skilless youth he drew
To have a feeling taste of Him that sits
Beyond the heaven, FAR MORE BEYOND OUR WITS."

On the last day of May, 1575, Philip Sidney returned to England. He was just in time for the festivities at Kenilworth, where his handsome person and mental qualifications recommended him to the queen. When she departed he attended her to Chartley Castle, the seat of the Earl of Essex, and there he first saw Penelope Devereux, the "Stella" of his sonnets. Elizabeth soon employed her new servant as an ambassador to Germany, and such was his wisdom and prudence in the performance of his mission, that William the Silent pronounced him "the ripest and greatest statesman that he knew of in all Europe."

The renewal of the French marriage project sent Philip Sidney in disgust from court. He went to Wilton, the home of his sister Lady Pembroke, and was persuaded by her to solace himself with the composition of the "Arcadia." At the same time his hopes of a union with his beloved Penelope Devereux were disappointed by her enforced marriage with another. This wound, however, was ultimately healed by the daughter of his old friend Sir Francis Walsingham.

In 1583 Philip Sidney was recalled to court and knighted by the queen. The following year he went to Parliament as the county member for Kent. Queen Elizabeth then employed him in several important missions, and his success induced her to make him Governor of Flushing, when war was raging between Spain and the Netherlands. The next year Sir Henry Sidney died, and Sir Philip became the Lord of Penshurst, but he was doomed to "tread the groves of Arcady" no more. On the 22nd of the succeeding September, the Battle of Zutphen was fought, and the poet-commander was dangerously wounded. While he lay upon the field, parched with thirst, water was brought to him, but he handed it to a dying soldier, saying, "Thy necessity is greater than mine." His death took place at Arnheim a few days later, and just before he breathed his last, he said to his brother, "Love my memory, cherish my friends: their faith to me may assure you they are honest. But above all, govern your will and affections by the will and word of your Creator. In me behold the end of this world and her vanities." His body was brought to England, and interred in St. Paul's Cathedral, amid a general lamentation.

Sir Robert Sidney was the next Lord of Penshurst, and he also succeeded his brother in the governorship of Flushing. On the accession of James I., he was made a baron by the title of Lord Sidney of Penshurst, and a few years later he was created Earl of Leicester. His only surviving son, Robert, succeeded to his title and estates, and was employed as an ambassador by King James. He was also nominated Lieutenant of Ireland, but never went thither.

Of his six sons, Philip, the eldest, inherited Penshurst; and Algernon, the second, became famous from his complicity in the Rye House Plot.

The portrait of Algernon Sidney hangs in the long gallery at Penshurst. "The face is stern, but noble and enthusiastic in expression, the eyes full of the calm resolve of melancholy thought; the head is slightly turned in profile to the left, the arm and form lean lightly but firmly on a thick book, on which is inscribed the single word 'Libertas,' in Roman character. In the background rises the Tower, and there is also the executioner's axe."

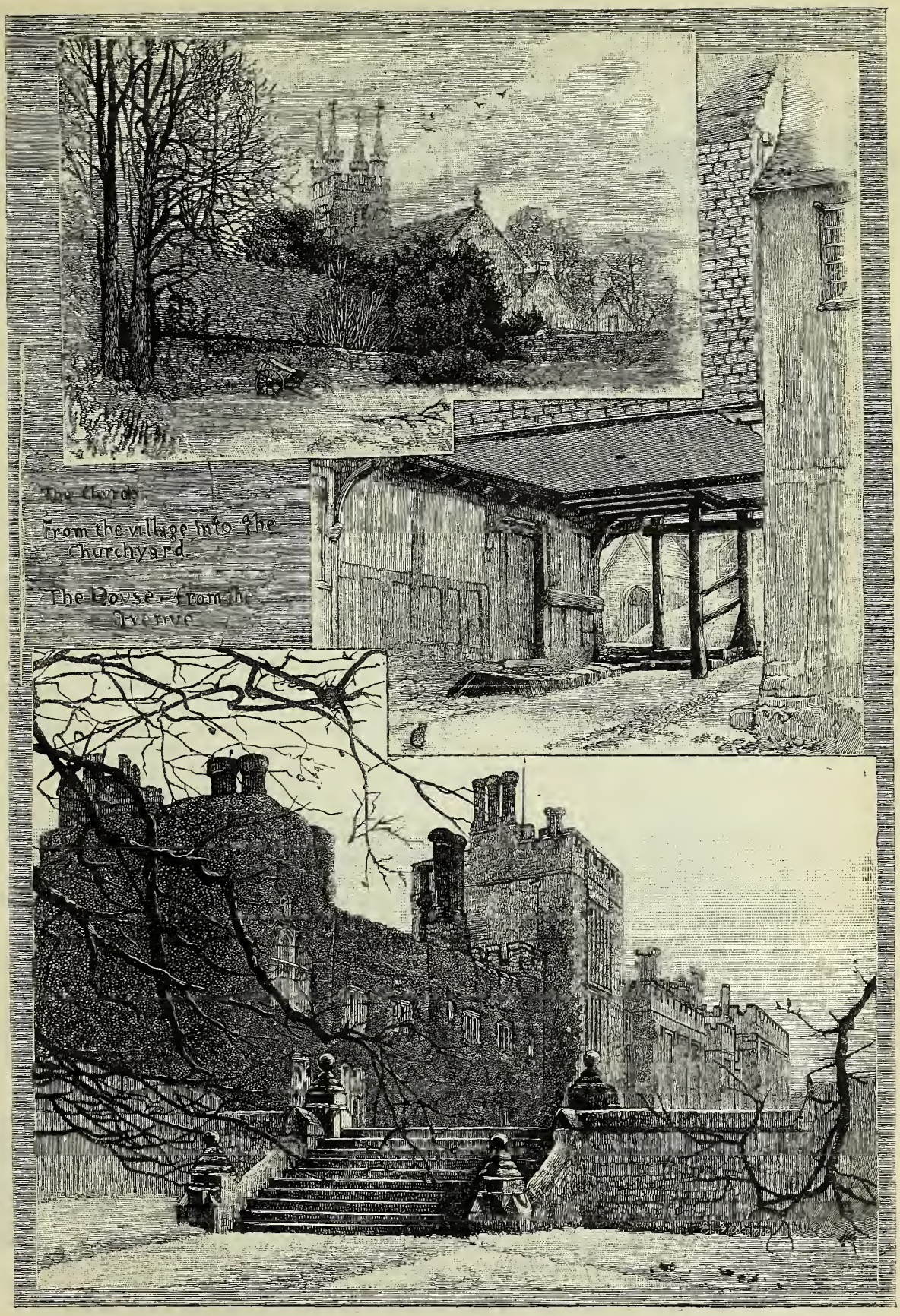
While a young man Algernon Sidney served in Ireland, and won a reputation for spirit and resolution. In the Civil Wars he sided with the Parliamentary army, but afterwards he opposed the policy of Cromwell. When all opposition was useless, he retired to Penshurst, and wrote "Discourses on Government." At the Restoration he was on a diplomatic mission in Copenhagen, and the fate of his friend Sir Harry Vane determined him to remain abroad. The wish of a dying father to see his face once more brought him back to England in the summer of 1667. He remained in seclusion at Penshurst until the dissolution of Parliament, and he was then persuaded by his friend, William Penn, to stand for Guildford, and afterwards for the Rape of Bramber, near Penn's seat at Worminghurst, and where Penn's interest was paramount. Dishonest means were adopted with success to prevent his return on both occasions, and Penn and Sidney were alike disgusted. The former sailed in the autumn of 1682 to found a better government in the newly discovered world, and the latter remained at home to watch for an opportunity to restore justice to England, and purity to the court. His concern in the Rye House Plot brought him to the scaffold.

"Are you ready, sir?" said the executioner, when he laid his head upon the block. "Will you rise again?"

"Not till the general resurrection," answered Sidney; and in another moment his head rolled in the dust.

Philip, Earl of Leicester, died in 1698, leaving an only son, Robert, who succeeded to his titles and estates. Robert was the father of fifteen children, six of whom, four sons and two daughters, were living at the time of his death. The four sons were successively Earls of Leicester, and at the decease of the last the title became extinct.

Penshurst Church stands close to Penshurst mansion. All the Sidneys who have died at Penshurst have been interred within its walls, and many have been brought hither from other places. Algernon Sidney is said to have been buried in the family chantry after his execution. Sir Stephen de Penchester, the original owner of the Sidney estate, has a monument in the church, and there is a brass to Paul Iden dated 1514.


The Church
From the village into the Churchyard
The House - from the Avenue

ON THE SANITARY ARRANGEMENTS OF THE HOUSE.

BY A FAMILY DOCTOR.

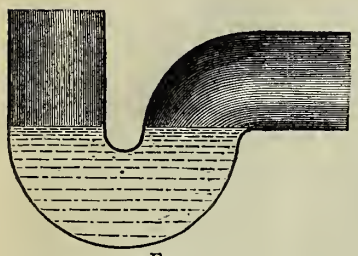


FIG. 1.

WHETHER our lot be cast and our days spent in busy cities, in rural villages, or in the quiet and open country itself, the question of drainage is one that ought to receive individual attention if health, or life itself, is valued as it ought to be. The man who now-a-days is careless in sanitary matters, who does not trouble himself about the air he breathes or the water he drinks, but is content to live, or "jog on," as he may call it, "as his fathers did before him," is, to say the least of it, very unwise; yes, and culpably so too, for his carelessness affects not himself alone, but the well-being of his family, if he has one, or his neighbour's, if he has not. It is ridiculous for any of us to talk of living as our fathers did, even although the figures on their tombstones prove them to have lived long in the land. With the increase of population in this country existence is becoming every year more precarious, and we have a hundred unseen foes to contend against of which our ancestors knew nothing —dangers are more numerous, cares more complicated, and the struggle for life infinitely harder.

In ancient times, so mythical history tells us, there lived in bogs and fens and flats hideous monsters, who were ever ready to seize upon and devour the unwary or benighted traveller; and even Shakespeare alludes to these when he makes Coriolanus say—

> "Though I go alone
> Like to a *lonely dragon*, that his *fen*
> Makes fear'd and talk'd of more than seen."

The name of this fen-fiend is *marsh miasma*, and thousands since Shakespeare's time have fallen victims to his fury. Would, however, that this dragon were content to dwell in his bogs and flats! we might then manage to keep at a safe distance from him. But no; he must follow the fashion of the age; he must have his town as well as his country residence; and though in cities such as London everything is done by the Legislature, by work of honest engineers, and by the advice of officers of health to keep the monster under hatches, he nevertheless frequently escapes—he bathes in the water we drink as pure, and he poisons the air even of our bed-rooms with his pestilential breath. And wherever he comes danger and destruction to life and health follow in his train, babes gasp and die, and older people, if they do not die outright, suffer from all the evil effects of chronic blood-poisoning. Nor is it alone the houses of the poor and middle classes that are invaded by this monster; he creeps into the mansions of the great as well. It is not yet quite ten years ago since royalty itself, in the person of H.R.H. the Prince of Wales, fell a victim to typhoid fever. Then throughout the length and breadth of the land a panic arose; people all at once seemed to awaken to the fact that an insidious and deadly foe was in the very midst of them, that they might often be more safe in the wilderness itself than in their own luxuriously furnished bed-rooms, and all through defective sanitary arrangements. The illness of His Royal Highness, which was so near to becoming a national calamity, culminated in being a blessing to the country at large, and for a time, at all events, greater attention was directed to the simple laws of health and hygiene, more especially as regards drains and drainage.

I do not hesitate to say, for I firmly believe it, that one-half of the diseases which at present attack the people of England are preventible, and would be prevented if we were one and all of us to follow the dictates of sanitary science, even although that science is only yet in its infancy.

The first duty of every intelligent man who is about to take a house or to build one is to see after the drainage thereof. Having done so to the best of his knowledge and ability, he ought to consider it incumbent upon him to see that the drains at no time get out of order.

If he takes a house without seeing with his own eyes that the drains are scientifically arranged and perfect, or if he erects a house and leaves the matter entirely to chance as long as he dwells therein, he must be living in a state of uncertainty as regards the health of his family or that of himself; and when illness arises how can he be sure that the drains are not in fault, that the trouble which has broken out in his house is not one that a little ordinary care might have kept at bay?

Over the air which a man breathes out of doors he has no control. That of towns and cities is often impure and polluted beyond all belief. To say nothing of its being loaded with sulphurous acid, carbonic acid, and sulphuretted hydrogen gas, itis poisoned by the pollutions on the streets from decaying vegetable matters, by the emanations from slaughter-houses and graveyards, and from the rivers themselves that flow through them; the very earth itself emits obnoxious vapours, while from sewers and cesspools gases are emitted and vapours exhaled that generate the most painful diseases—typhus and typhoid, diarrhœa and dysentery, and even cholera itself. And yet here is a crumb of comfort for the dwellers in such large cities as London, Birmingham, and Manchester: the very smoke from your chim-

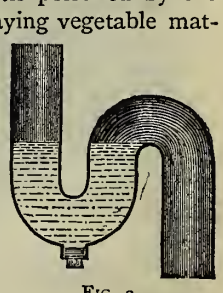


FIG. 2.

neys, of which you so greatly complain, helps to decompose and destroy the malaria in the atmosphere you breathe. The idea of a London of the future, when every householder will consume his own smoke, when smut and soot shall be unknown, and a "fog" a dark dream of the distant past,

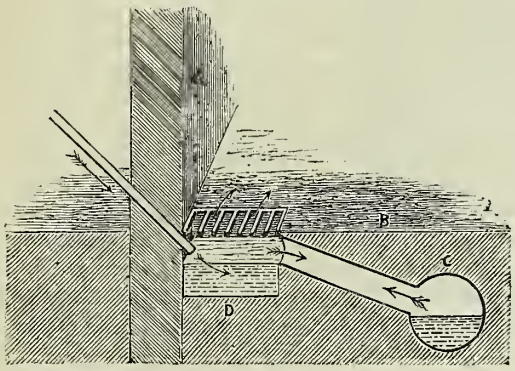


Fig. 3.

when the city's walls shall gleam like frosted silver, when trees shall grow green in all our squares, when our monuments shall rear their alabaster heads in skies of azure-blue, and the river itself, clear and pellucid, glide quietly on to the sparkling sea, is a very beautiful one; but such a London as this would after all be but a white-washed sepulchre, unless thorough and radical reform began first with sewers and sewerage, drains and drainage, and everything else that at present renders many districts of the largest city in the world very hot-beds of fever, plague, and pestilence.

I will now suppose that my reader is a householder —that before he took possession of his dwelling, he was wise enough to obtain a complete map or plan showing the position of every pipe and drain in the house. This may be a somewhat difficult task for any one to accomplish, but depend upon it, it will not be labour lost.

There should be in every properly drained house three separate and distinct systems of overflow and waste-water discharge, and these should, if possible, be not only partially, but entirely apart from each other; and each drain should be protected by a trap, the simplest form of which I shall presently describe. First and foremost, the water from the bath and drinking cistern should have its own outlet; secondly, the slops of different kinds and the kitchen sink; and thirdly, the water from the closet. So much for waste slops and water; but independent of this there is the supply of water to the house to be thought of, and properly looked after. The great and often fatal mistake in the water-supply system, is that of having only *one* cistern from which water is furnished both for drinking and for drainage or sanitary purposes. The veriest tyro can understand how poisonous pollution is certain to occur where such an arrangement is adopted. Not only should the offices *not* be supplied from the drinking cistern, but even the *overflow* pipe from the latter should be kept carefully clear of the soil-pipe. The lavatory water and that from the cistern's overflow are the least likely to be hurtful unless polluted externally; they may therefore have one and the same outlet into a surface drain protected by a trap. This drain in the country may lead away from the house in any way most convenient and safe; but in towns this water *must* flow at last into the sewer; therefore the thoughtful householder will see that after the pipe leaves the house it shall fall into an open grating-covered gully-pit before it runs away towards the sewer.

But wherever possible even the water from the bath-tub should have a different and separate place of discharge from the cistern overflow, and if its pipe is connected with a house drain it should be protected by a trap. Now the simplest form of trap is what is called, if my memory serves me rightly, a water-seal, of which I append a rough sketch (Fig. 1). The dip of this trap must be perfectly plumb and not distorted in any way; it should be sufficient in depth, and the whole pipe should be large enough.

But there are one or two other things to be thought about in connection with this simple trap, else in the end it may prove a nuisance. It should be made strong and of a lasting material, and a material that will not easily corrode with the action of either water or gases. When not in use it should never be allowed to become empty from evaporation, and it should have at the lower bend (in most cases) a means of communication with the interior (Fig. 2). When in use it should be frequently flushed with pure water, and nothing should ever be allowed to pass down it which is in the least likely to clog it.

If properly attended to, such a trap as this is a great safeguard against the introduction of foul and

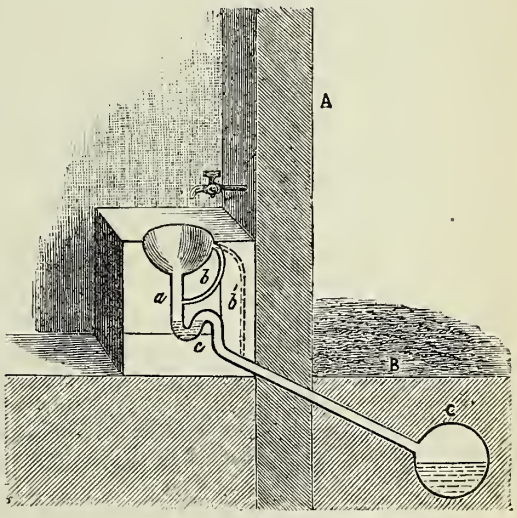


Fig. 4.

poisonous air into our houses or apartments; but of course if it gets out of shape it is worse than useless; it should therefore be properly fastened and supported, and not only the trap itself, but the pipes that lead to it and from it. The time when the water in such a trap is most liable to evaporation, and foul air thus allowed to pour into the house, is when families go

from home during the holidays, and the house is either shut up entirely or left to the tender mercies of servants. Knowing this before going from home, people would do well to plug the end of the pipe that leads into the bath-room, and flush the pipe on their return.

Supposing that the pipe which conducts the water from either the bath-room or bed-room, or the drinking cistern, *must* discharge itself into the same drain which also receives the kitchen-sink slops, or probably even the water from a closet, then we ought to have traps of the very safest, although simplest, sort that sanitary engineering can devise.

It is very unfortunate for householders that some builders and plumbers should think it necessary to keep people so much in the dark as regards not only the mechanism, but even the whereabouts, of the pipes and traps and drains of dwelling-houses. Matters like these, that are so intimately connected with the health and comfort of families, should be made as clear to them as the light of day itself. As matters stand, if anything goes wrong with a pipe or a drain, we send to the builder, and he sends a man, and that man does something; but what the man does do, in addition to turning the whole house topsy-turvy for an hour or two, we, the unhappy inhabitants, know no more than Adam—at least, as a rule.

In every modernised house in the City, or in towns at all events, there are prettily arranged and ornamental lavatories. These are extremely handy, and useful. Over the marble basins are taps, their pipes communicating with a cistern above which may always be kept filled with the purest of water. The whole arrangement viewed externally seems perfection itself, even looked at through sanitary spectacles. But is it so in reality? Let us see. If the pipe that leads from the lavatory after it leaves the house—or any other pipe, for that matter—falls into a ventilated catch-pit or gully-trap, and does not run right into a drain or sewer, there will be less chance of foul air getting up into the apartment. As some of my readers may not quite understand what I mean by a gully-trap, I append a sketch of one (Fig. 3). Here A represents the wall of the building, and B the surface of the ground; the sewer is marked C, and the gully-trap D. This gully, or pit, it will be seen, is open at the top, but covered with a grating. The protection afforded by such a trap is this: the water from the house falls first into the pit, and thence into the sewer, as represented by the downward arrows; the obnoxious gases, represented by the upward arrows, whether from the sewer or the contents of the gully, find vent through the grating into the open air. But there are two pipes leading from the basin in the lavatory: one the escape-pipe at the bottom, *a* (Fig. 4), and the other the overflow-pipe at the top, *b* or *b'* (Fig. 4). Now, granting that pipe *a* is protected against the egress of a current of foul air by a water-seal trap, *c*, the question which concerns the householder is this: does the overflow-pipe open into the escape-pipe above the trap?—which it ought to do, as seen at *b* in the sketch—or does it open below, as represented by the dotted lines marked *b*? The reader will easily perceive that, should the latter be the case, there is nothing to prevent foul air from gaining admission into the house *if* there be no external gully-trap; and I believe I am right in saying that sanitary engineers are agreed that, while moderate in diameter, the soil-pipe should not be too wide, else the flow through it would be slow, and more strength of water would be required to flush it. Near the junction of the soil-pipe with the drain or sewer outside the house there should be one or two traps, and these, as well as every trap connected with either drain or pipe about a building, should be so positioned as to be easily got at, and I need not add that their whereabouts should be well known to the tenant.

Every trap and every drain should be *ventilated;* the ventilating pipe, which need not be a large one, should be placed on the external or sewer end of the trap, and ought to be conducted up along the outer wall, so that the gases may escape into the open air as high up as the chimneys themselves. To prevent all danger from such ventilating pipes, they ought never, under any circumstances, to be allowed to pass *through* any portion of the building.

I do not like drains that pass through the soil beneath the house, for this reason: if from any chance the ground sinks or "gives" under them, they get bent and leaky; if, however, such a route for the drain must be adopted, see that it is laid upon hard, unyielding concrete, and that it is made of well-glazed earthenware. A great many people never feel perfectly well at home, and blame the climate; in some cases it is very likely that it is the drains, and not the climate that is in fault. Now just a few memoranda in conclusion, which may be worth making a note of:—

1. Before you take a house get a plan of pipes and drains, and a sketch of the kind of traps used.

2. There should always be different cisterns for drinking-water and other use.

3. Even the overflow-pipe of the former should have no connection with the latter.

4. Avoid all complicated methods of guiding pipes and placing drains.

5. See that all pipes are properly secured in position.

6. See that all pipes have traps.

7. See that perfect ventilation of pipes and drains is secured.

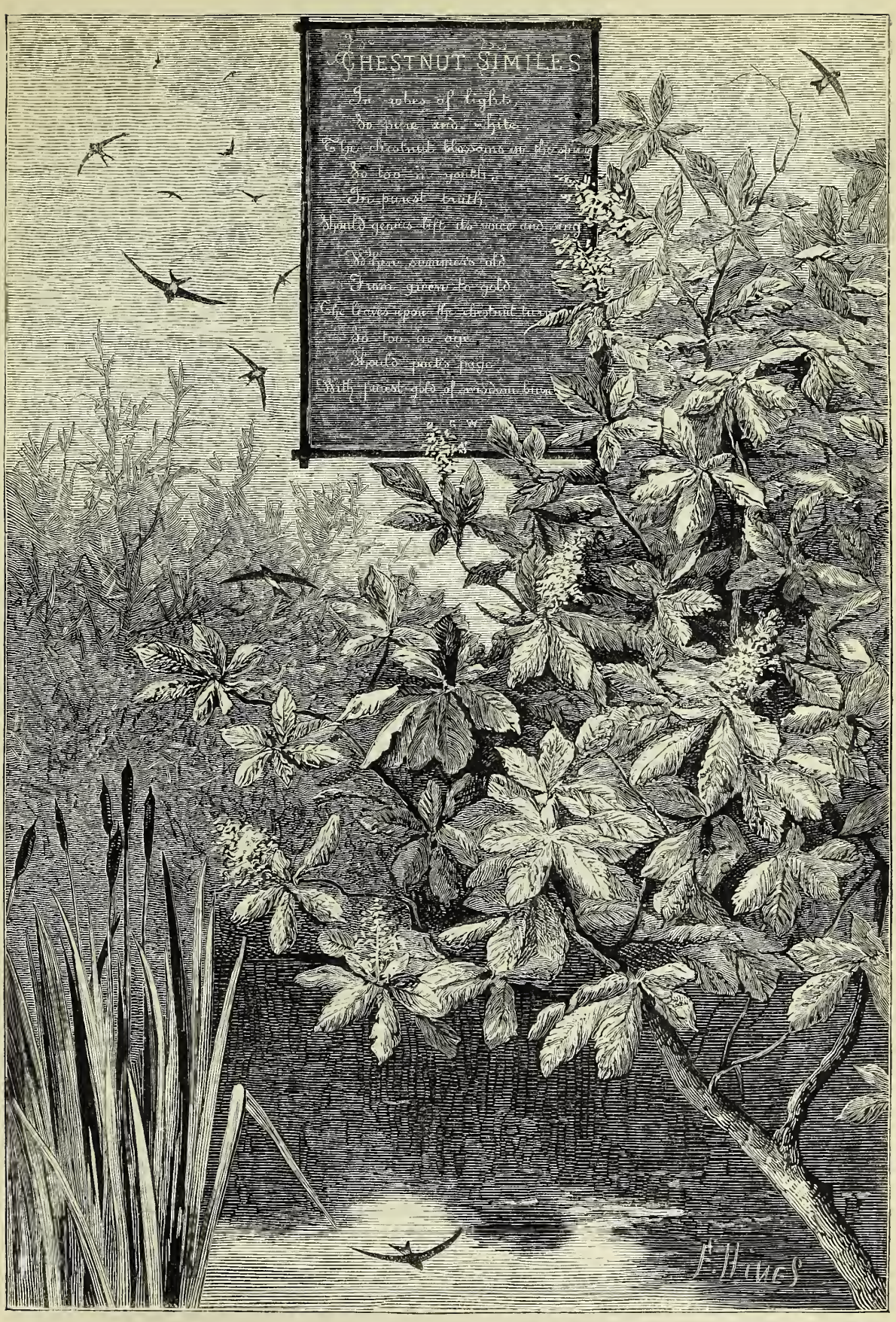
8. Keep all traps clean, and frequently disinfect both pipes and traps as well as drains.

9. Constantly examine traps in which the water is likely to get low or evaporate. If the water gets low in them, in rushes the foul air.

10. Keep the drinking-water cistern clean and free from dust and all impurities.

11. Be most particular with the purity of the sink and its pipe. Never allow the brass perforated cap to be removed from the top of the pipe; forbid the bed-room pails being emptied in the sink, and pour a pail-ful of boiling water into it once a week, to get rid of any grease that may cling to the interior of the pipe.

12. Do not have pipes and traps so enclosed that you cannot get at them.


CHESTNUT SIMILES
In rules of light,
So pure and white
The chestnut blossoms in the spring
So too in youth
In purest truth
Should genius live the voice and song
Where summers old
Frame green to gold
The cones upon the chestnut tree
So too as age
Should pack's page
With purest gifts of mercy's balm
E. Hughes

SOME PRACTICAL HINTS ON LIFE ASSURANCE.

OUR object in this paper is to place before our readers a few simple rules for guidance in the selection of a Life Assurance Office, and, while doing so, to endeavour to explain the relative advantages of the various methods upon which assurances can be effected. But before commencing this, let us fully understand the principles upon which the business of the societies is conducted.

If a number of persons, all of the same age and in the same condition of health (that is to say, with the same expectation of life), were to club together to provide a fund for the payment of a given sum at the death of each, it is evident that each would have to make the same periodical contributions to the fund, those contributions being just sufficient at compound interest to amount to the sum required at the end of the expectation of life, whatever that might be.* Some of the members of this club would, it is true, live longer than the time calculated upon, others would, perhaps, live about that time, while some would die early. But if the number of members was sufficiently large to provide a fair average if no severe epidemic occurred, and if the calculation of expectation of life turned out to be correct, it would follow that the amount of the contributions would be just sufficient to pay all the sums arranged for. Those blessed with long life would by their extra payments have contributed to the welfare of the families of those who had died early, the result being an equitable one, as the possibility of either event to any member was uncertain at the commencement of the club. But as the ages of the members would vary—it being impossible to gather together a sufficient number of the same age—it would be necessary, to put all upon an equal footing, that the amount of the contributions should vary according to the health of each member, and the number of years he might be expected to live and contribute to the fund.

Having proceeded thus far, let us now consider what is the practice of the Assuring Societies. It here becomes evident that there must be added to the contributions required to make up the amount payable at death, a sum sufficient to provide for the working expenses of the society (such as management, expenses of obtaining assurers, investing the funds, the employment of actuaries, and a staff to make the calculations necessary from time to time). Provision must also be made for the various contingencies likely to affect life; and in the case of Proprietary Companies there must also be added a sum to remunerate the shareholders for their risk and the guarantee of their capital. The amount added for these purposes to the necessary contribution is technically known as the "loading," and the two together make up the "premium" charged.

The profits which are divided from time to time among assurers or policy-holders, under the name of "Bonus," are chiefly derived from three sources:—First, from any excess of loading beyond the actual expenditure in the conduct of the business; secondly, from any excess of the interest earned by the invested funds of the society beyond the rate assumed as obtainable in the calculations on which the premiums are based; thirdly, from the selection of healthy assurers, likely to live longer than the expected duration of life at their ages; and fourthly, from profits derived from non-participating and short term assurances. It will be seen from the first of these sources alone how important it is to the assured that the affairs of the society he may select are conducted with the strictest economy.

It may be of interest here to mention that it has been found by experience that a policy-holder in a good and sound Assurance Office, living his expectation of life, would make from about 3 to 3¼ per cent. compound interest on his money—that is to say, the amount of his policy and its accrued bonuses would be about equal to the amount of his yearly payments put away at per 3 cent. compound interest. It is obvious, too, that if he died before attaining his expectation his family would derive greater advantage than if he had invested the amount of his premiums in any other manner.

We now have to consider the necessary steps to be taken by a person proposing to assure his or her life; the first being the choice of the office, and this will be influenced by many questions, all needing careful consideration.

First, Shall the office be a Proprietary or a Mutual one? In a Proprietary Company the assured has the guarantee of the capital and liability of the shareholders, and, to a certain extent, can be sure that the expenditure will be carefully watched by them. It must not be forgotten, however, that all this must be paid for by way of shareholders' interest on capital and proportion of profits—this last, however, being generally comparatively small, as the greater portion of profits is commonly divided among the policy-holders. On the other hand, the expenses of a Mutual Society (and consequently the rates of premium) should

* Various tables of the average expectation of life have been compiled, those best known being the "Northampton" and "Carlisle" (both based upon the experience in those districts), the "Government" (based upon the ascertained duration of lives of Government Annuitants), and the "Experience," from the actual experience of seventeen Assurance Societies.

be lower than those of a Proprietary Company, there being no payments to make to shareholders; and every assurer having a vote at the meetings, and therefore a voice in the management, it is in his power to interfere should a lavish or less careful scale of expenditure be inaugurated. It would therefore appear that while in a recently established office the guarantee of a large and wealthy body of shareholders is of great moment to the assured, in the case of old and well-established offices his decision would much depend upon personal feeling in the matter.

Next comes the question of the soundness of the office—that is, has it been hitherto so managed that its funds are now sufficient to meet all liabilities were it immediately wound up? By liabilities we mean the sums that should be returnable to the then existing policy-holders, having regard to the duration of the policies, the ages of the lives assured, and the future premiums likely to be received from each. It is obvious that an exact answer to this question could only be given by an actuary in possession of data concerning all the policies of the office then in force, and we are therefore thrown back upon generalities. One thing, however, is self-evident: that being—the larger the proportion the funds of the office bear to the total amount assured, the greater must be its safety. Mr. Gladstone, in his speech on the Government Annuities Bill (7th March, 1864), says:—"You know a good deal about the position of an Insurance Society when you get three things: first of all, its date; secondly, its income from premiums; and thirdly, its accumulations. From the relation of these three one to another you know pretty clearly the state of the society." In acting upon this, one must of course select for comparison two or more offices founded at about the same date. An eminent actuary gives us this caution:—"Do not insure with an office that possesses an insurance fund or accumulated capital in hand of less than a million, or at any rate three-fourths of that sum, without inquiry into the condition of that company."

These points settled, the very important question presents itself as to the percentage of premiums devoted to the working expenses of the society. Though a policy-holder in a Proprietary Company can afford to lay less stress upon this point (having the guarantee of shareholders' capital) than one assured in a Mutual Office, it will be seen from our introductory remarks that the subject is of the utmost importance to all, as not only do the bonuses depend in a great measure upon it, but also the ultimate soundness of the office. Great diversity of opinion exists even among the most experienced actuaries as to what is a proper percentage of premium income allowable for this purpose—a young office being at greater expense than an old and well-established one to obtain its business. It is, however, evident that the lower the working expenses are in proportion to the premium income of the office, the greater will be the advantage to all concerned. About 16 per cent. appears to be the average percentage of all the offices, and it would therefore be advisable not to select an office whose expenditure (both working expenses and shareholders' dividends, &c.) exceeds that rate. Indeed, about thirty offices spend less than that percentage, and as many as about fifteen spend less than 13 per cent.

In comparing the expenditure of different offices, there must be borne in mind the rates of premium charged, as a moderately high percentage of expenditure on a low office rate of premium would in some cases be less than a low percentage on a high rate of premium.*

The rate of premium charged by the office, though not so important from an economical point of view as the percentage spent in expenses, is yet of great moment to a young assurer or to one of limited income desirous of making the greatest present provision for the least yearly outlay, as the lower the rate may be consistent with safety, the greater amount will a given sum provide in the event of an early death. Some attention should therefore be given to this subject when selecting an office.

Reference should also be made to the rate of interest assumed in the office calculations as obtainable by its invested funds; and it will here be granted that the lower this rate may be, the less will be the risk of the office to under-estimate its liabilities. Though some offices have received about $4\frac{1}{2}$ per cent. interest on their investments, it must be borne in mind that money cannot now, and in all possibility will not in future, be invested in thorough safety to pay more than about $3\frac{5}{8}$ per cent. Considering too that the office must always keep in hand a large sum of money to meet current liabilities and waiting investment, and therefore not earning interest, it would appear advisable to select an office not assuming in its calculations more than $3\frac{1}{2}$ per cent. as derivable from its investments.

Lastly, attention should be given to the reputations the various offices may have for the amount of care exercised in the selection of healthy assurers; or if lives liable to more than ordinary risk be assured, that proportionate increases are made in the rates of premium charged.

The office once selected, the intending assurer has next to determine upon what method or table to assure.

The first method, and the one most usually adopted, is that of Annual Payments for the Whole Term of

* The following rule will give a ready means of comparison on this point:—First, find your "expectation of life" by the Carlisle table (given in almost every Ready Reckoner), that being the table most generally used. Next, ascertain—also from the Ready Reckoner—the sum required at 3 per cent. compound interest to be put aside for the number of years of the expectation to amount to £100 at the end of that time: this will give the yearly contribution required, apart from all question of the office-loading already explained. Then work out the following as a common proportion sum in arithmetic:—As the Net Contribution (*a*) is to the Office Premium (*b*) so is the rate of percentage on the premium (*c*) to the rate of percentage on the Net Contribution (*d*). Thus—

(*a*) Net Contribution.			(*b*) Premium.			(*c*) Percentage on Premium.		(*d*) Percentage on Contribution.
£	s.	d.	£	s.	d.			
As 1	10	3 :	2	0	0 ::	9·5	:	12·56
1	10	3 :	2	5	4 ::	7·75	:	11·62
1	10	3 :	2	5	4 ::	6·75	:	10·12

Life, with Participation in Profits. This, if the life assured should be a long one, will ultimately, by the accretion of bonuses, yield much more to the policy-holder than one assured by (secondly) Annual Payments for the Whole Term of Life, *without* Participation in Profits, for which the rate of premium is lower, and which would consequently for the same yearly payment give a much larger amount in the event of an early death.

The practice of the offices varies with regard to requiring proof of age when death may happen ; some require it, others do not. But in all cases it would be advisable to have the age of the life assured admitted on the policy, as the necessary proof can always be obtained by the assurer with much greater facility than by his executors. The proof required would be either (*a*) a Copy of the Register of Birth—that is, if the person assured was born after registration became compulsory ; or (*b*) a Certificate of Baptism, provided it gives the date of birth ; or (*c*) a certified copy of the Entry of Birth in the Family Bible of the parents ; or, failing all these, (*d*) a declaration made by a friend with full personal knowledge of the age (he being, of course, older than the assured) ; or (*e*) by a declaration made by a younger friend able to give satisfactory grounds for his belief as to the age.

The assurance once made and the policy received, the assurer has but a few things to attend to beyond, for his own satisfaction, watching the affairs of the office, as shown by its annual reports and balance-sheets. He must, however, take care regularly to pay the Renewal Premiums within the days of grace allowed (fifteen or thirty days, according to the office and the terms of the policy), or else the assurance will lapse and all benefits be lost. With this view he must keep the office informed of any changes of his residence.

Should he wish to travel beyond the limits allowed by the policy, he must give notice to the office of his intention, and pay any additional premium required in consequence of the increased risk arising from the voyage, the climate of the country to be visited, or any change of occupation likely to arise.

And, lastly, whenever the quinquennial or septennial division of profits takes place, the policy-holder has to decide in what form he will receive any bonus falling to his policy. He generally has offered him the selection of any one of four modes:—First, an addition to the sum assured and payable at death (termed a Reversionary Bonus). This is the form usually accepted, as, in addition to increasing without further expense the sum assured, it as a rule has the advantage of earning additional bonuses in future. Or, if the assured be of opinion that the present amount of the policy is sufficient for his purpose, he can (secondly) commute the bonus for a sum in ready money ; or (thirdly) he can commute either for a reduction of premium for the whole term of the policy, or for (fourthly) a still greater reduction of premium for the next five or seven years only—that is, until the next division of profits.

THE TROUBLE IT BROUGHT.

By C. DESPARD, Author of "The Artist and the Man," "When the Tide was High," &c.

CHAPTER THE ELEVENTH.



THE dinner passed pleasantly and gaily away. Horace appeared with dessert, and had to stand the brunt of many inquiries from his uncle and aunt. He parried them skilfully, and as he was an immense favourite with everybody, the absurdity of his conduct was not disastrously enlarged upon. To my mind he looked rather as if he had been assisting at a merry festival than as if he had just missed his dinner ; for here, in spite of urgent entreaties from soft-hearted Mrs. Green, the colonel stood firm. If young people could not be in to hours, they must do without their meals. There should be no return of soup or entrées ; pudding and fruit must now serve the young gentleman's turn. "Discipline," he observed sagaciously ; "military discipline, if you like. There is considerably too little discipline about now ; young people have it all their own way. They'll be giving *us* lessons in deportment soon." Horace protested that he was not hungry, and made the most of the pudding. Certainly, when we all went out into the garden he did not seem to enjoy himself the less for the lack of his dinner.

The storm our friends had prophesied had not arrived, and the night was still and sultry. The harvest moon hung, yellow and large, in a heavy leaden sky, and huge sulphurous clouds came moving up steadily from the west, and settled in heaped-up masses over the horizon ; now and then, like a grim messenger warning danger, a ragged sheet of vapour swept the pale faces of moon and stars, and a sighing wind arose, to fall back again into sullen silence.

Nina and I and the other dinner guests, including Miss Ashley, Dr. Perry and his wife, Mr. Montgomery

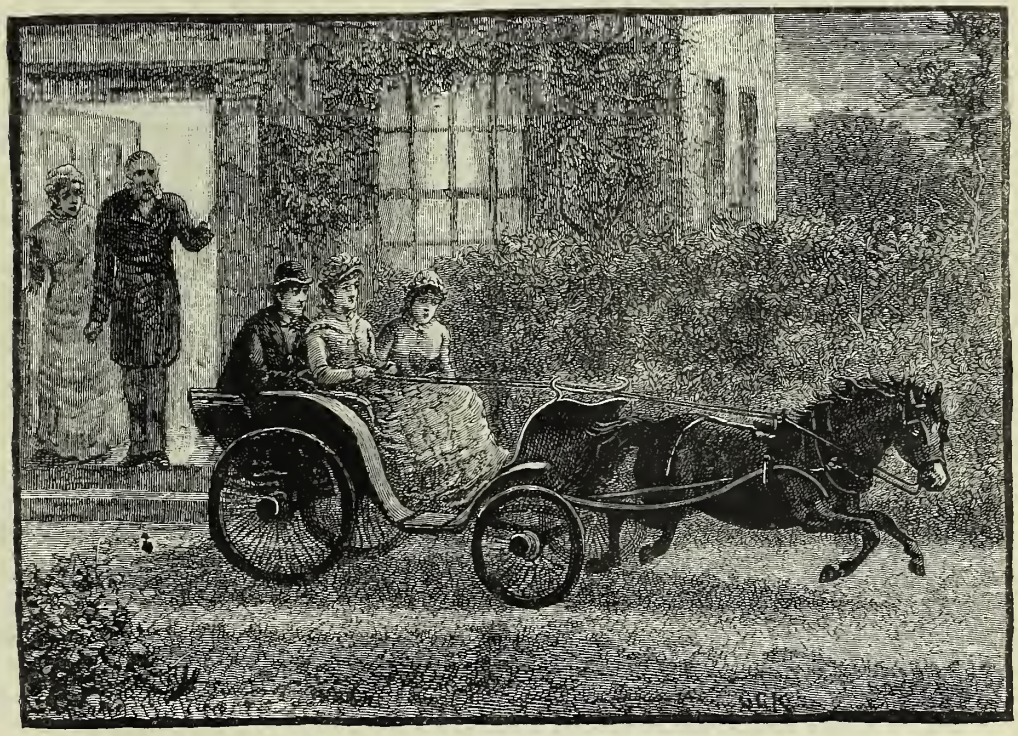
Lancing, the squire, his two handsome daughters, Emily and Ann, and his son, a young gentleman in the Guards, not too much a man of the world to have forgotten his first love for his gay uniform, stood with Mrs. Green and the colonel at the head of the marquee.

Guests came pouring in. This was not a formal business. The colonel and his genial wife were popular; they had entreated their friends to come early; and every one expected to be made welcome and happy.

Nothing could exceed the picturesqueness and quaint beauty of the scene that followed. The young people were in semi-fancy dresses, brilliant in colour and of charming variety. Rubens hats and brigand hats, crimson hoods and Spanish mantillas, crowned many a costume as graceful as it was fanciful. The garden was brilliantly illuminated, coloured lamps swung from the evergreens which surrounded the lawn, and through the dim beech-wood that made a belt round the colonel's small demesne could be seen the gleam of water lit up by flaming torches. And amusements had been provided plentifully. For the younger members of the party, who were numerous, there were boats on the lake in the woods, and fireworks that made a brilliant show over the dark waters; for those somewhat older there was the novelty of lawn tennis by torch-light.

A military band had been hired for the occasion, and to some of us who loved bright music and a brilliant spectacle no pleasure could have been greater than to pace the soft grass, looking and listening, and now and then exchanging a few words with one of a kindred mind. Then the little Madrigal Society belonging to our neighbourhood was present in full force, and in the intervals of the band-music glees and part-songs filled the air.

The exquisite effect of some of Mendelssohn's lovely music as, borne on the night wind, it came floating towards us from the woods, it is almost impossible to put into words. To me it seemed like a great sad language that, striving to penetrate the heavens, drops, spent with toil, upon the earth; and more than once, as I listened, my eyes filled with tears.



"MY IMPATIENT LITTLE STEED BROKE AWAY FROM DETAINING HANDS" (*p.* 290).

I speak—I suppose this is natural—of my own impressions first; but I think I must have been the only person present whom the scene affected in this way. Melancholy, even pleasing and romantic melancholy, was far from the thoughts of Mrs. Green's guests that evening. Everything was gaiety, movement, and animation. Harry Elmtree, I remember, came up and rallied me on my quietness. He pointed my cousin out to me, and I was glad to see that Nina's morning gaiety had entirely returned. Horace followed her about like her shadow, and wherever these two went they were the life of the party.

"I like Miss Nina," my young friend observed confidentially; "she's a girl without any nonsense about her."

I thanked him for his good opinion of my cousin.

"And oh!" he went on, "did you see her put off Mr. Lancing just now? It was the finest thing. He

wanted to *conduct* her—needn't say that was his expression—to the lake. She said she was interested in flowers, and asked Horace to show her the greenhouse. Young Lancing's face was a study. He calls this a romp, you know, and says he hates to be classed with boys."

The party was given in honour of the cricket-club, and many of the large intermediate order of school-boys and school-girls were present. I knew that how to group successfully their elder and younger guests had been a matter of some anxiety to our kind entertainers, and I was not surprised at Mrs. Green coming up to me presently, with a face that was literally radiant.

"She is a charming girl!" cried the old lady. "I mean your cousin, of course. The boys will never forget it. You see if she is not the romance of a good many of them. And so much the better. No boy is the worse for a first heroine who is first-rate every way."

And the fact was that Nina gave herself up entirely to the boys throughout the evening. They surrounded her, mobbed her, and quarrelled over her, in a way that was most amusing to witness.

Mr. Lancing and the other moustached gentlemen who were present, not having the ghost of a chance with her, withdrew in disgust.

When the merry supper in the marquee was over, and kind Mrs. Green was tucking us into our carriage, she bade the warmest of good-nights to my cousin.

"You are a dear, kind, good-natured girl!" she said. And Nina replied sweetly that she owed more to the boys than they to her; she had spent a most delightful evening. More words the enthusiastic old lady would have poured out but for James's earnest protest: "We ought to have been off an hour ago," he said, looking up at the sky suspiciously.

I laughed, and said the storm had been too much predicted; it would not come. Mrs. Green tried to persuade us to spend the evening at her house, and the colonel, rushing out, declared that it was madness, sheer madness, to attempt such a drive on such a night; in the midst of which my impatient little steed broke away from detaining hands, and trotted down the avenue at such a pace that the protests of our kind entertainers were very soon lost in the distance.

"I advise you to make him go," said James from behind; and I touched up the brave little animal, who responded gallantly to my hint. Under overhanging banks, crowned with beech and elm and oak, where the darkness was almost impenetrable, and over wide spaces, where the straight road, like a white line, stretched before us, with the lowering thunder-clouds over our heads, we flew.

"I think we shall do it," I said, for the scattered lamps of our village were coming into sight.

Even as I spoke came the first distant grumbling of the thunder, and a large warm rain-drop fell upon my hand. Then in less time than it takes to write the whole of the dark night-world, which had been so still, was in commotion.

The wind moaned and sighed, as if panting to free itself from long imprisonment; there was a sound of crackling among the tree-branches; the last vestige of moonlight disappeared, and the steel-bright stars, that up to this had peered by twos and threes through rents in the vapoury veil below them, were withdrawn. All was in darkness, save for the storm-clouds' self-illumination, the lurid, sulphurous yellow that made them terrible.

"We shall *not* do it," said James. "Will you give the reins to me, or are you strong enough to hold them?"

I said that management, not strength, was required. The pony made a sudden dart from one side of the road to the other. I soothed him by my voice, but my voice was drowned in a peal of thunder that broke right above us, and then died away in sullen reverberations. Scarcely had we recovered from this shock before there came a flash of lightning more terrific far than any that had preceded it; for one moment the whole world was light, and the inner depths of the deep heavens seemed open to our gaze. Darkness and an awful crash, as of the earth's forces meeting one another in deadly tumult of war, succeeded.

It was a horrible moment, but I had not time to feel its horror. If we were to reach home in safety, it was necessary for me to have all my wits about me, for the pony, terrified by the noise and light, had taken the bit between his teeth, and was rushing frantically through the darkness. I was conscious that I had lost all control over him.

"Where are we?" I said to James.

"Not far from the church—perfectly straight road. You can let him go."

I heard a kind of groan proceed from Nina. "Have courage," I said to her, "and hold fast."

She did not seem to hear me. I saw that she was craning her neck forward, as if by an effort of will she could penetrate the darkness. And still the frightened pony flew madly over the flinty road, striking sparks from his heels, and still I tried, but vainly, to regain my mastery over him.

"I see a light glimmering," I said at last. "James, are you sure we are near the church? There are no inhabited houses close to it."

"I am sure we shall pass it soon. But where can the light come from? They would not be practising in the church so late."

"Some one is benighted, like ourselves, and is carrying a lantern," Nina suggested; and then we all held our breath, and spoke no more, for the critical moment had arrived. Beyond the church the road turned sharply to the left. If I could not so humour the pony as to get him round this corner, we should, in all human probability, be dashed to pieces against a blank wall.

Nearer came the dark mass of the old church, and that yellow light faintly glimmering. Our pace did not slacken. I worked at the reins. The pony seemed to feel my hand. I believed he was becoming exhausted. At break-neck speed we passed the churchyard hedge and the little stile where Nina and I had halted on that memorable night, some weeks before, when we

heard the strange unearthly cry that had haunted me ever since.

My nerves were naturally excited; the darkness and the storm were favourable to superstitious feeling. The ghost legend and its attendant mysteries seemed horribly real to me at that moment, and I was scarcely surprised; I only felt a little sick and strange, and the power so much needed seemed to desert my arms suddenly, when a cry of a different character from the former one—for it was not melodious or prolonged, but short and hoarse—struck upon my ear, followed by what seemed like the rattling of chains.

At the same moment Nina clutched my arm. Had it not been that the pony possessed more sense than any of us, we must have come to terrible grief; but even while I was giving up all for lost, he dashed round the corner, at such speed that the phaeton swayed from side to side, and it was all we could do to keep our seats.

Then, as if alarmed by his own feat, he stood still as a stone, trembling violently.

At the same moment Nina put her hand to her head. "My hat!" she cried out; "I have dropped it." And she leapt to the ground.

"James will find it," I cried out.

"But I know exactly where it fell," she sent her voice back to us. Being marvellously swift of foot, she was already some considerable distance from the carriage.

"Go after her," I said to James.

The rain was now pouring down in torrents, and the road was like a water-course.

"In my evening boots? Thank you," answered James. "If Nina chooses to act the part of a mad girl, I don't see why I should act the part of a madman; and I tell you what: her hat was only an excuse. I saw her take it off deliberately and throw it out. I thought then that fear had made her take leave of her senses; now I understand."

"You understand what?" I asked. I felt myself turning very cold.

He answered: "I heard your ghost, Mary; if it hadn't been so dark I should have seen it. To-morrow I mean to search that old house, and if something curious is not brought to light I will allow you and the rest of the world to go on believing in ghosts to the end of the chapter."

I tried to answer, I tried to protest, but I could not; my tongue clove to the roof of my mouth; and James went on with the triumphant air of one who has gained a victory, and intends to make good use of it: "Now I hope you see. Now I hope you will take my advice, and not be so exceedingly enthusiastic and little-girlish for the future. Oh, this rain! I declare it is wetting me to the skin. Come on without Nina. She has not the smallest right to keep us waiting in this way."

I answered with indignation, "Go home without Nina! What do you think papa would say?"

James muttered a few words, of which all I could distinguish was "folly and infatuation." He declared further that if he did not give some of us a lesson soon it would be a wonder; and while he was giving vent to his feelings, Nina came rushing back, breathless, with the lost hat in her hand.

"Why did you wait, darling?" she said to me as I helped her in. "I could have found my way home alone. And really it was absurd of me to think of my hat before you."

"Highly absurd," growled James.

"It was partly that I was over-excited," she went on, "and a little frightened."

"But Tommy is quiet enough now," I said; "and there, thank goodness, are the lights of our own house. Papa will have been anxious."

He had been anxious, fearfully anxious. He looked quite careworn and old as, having heard the wheels of the phaeton, he stood at the open hall-door to receive us.

"I almost hoped Mrs. Green would have kept you," he said; "but I am thankful all the same to see you. I could not have rested. Nina, my child, your hair is wet; how does that happen? Here, let me take your cloak. I have had a fire lighted in my study, and the kettle is boiling. A little hot wine and water will do you all good."

The comfort and rest of my father's face and voice, and the delicious sense of safety induced by the warm little study, brightly lit by lamp and fire, after the danger, the darkness, and the restless uneasiness of the last hour, were more than I can possibly describe. I felt choked, and I was not surprised to see Nina's eyes fill with tears. My father saw we were excited, and speaking lightly, to conceal his own emotion, he went to and fro between us, removing our wet gloves and boots, persuading us to take the hot drink he had prepared, and waiting upon us as if he had been a woman.

I was accustomed to my father's gentle, helpful ways. I had often said that he united in himself some of the finest qualities of both man and woman; but they were new to Nina, and they impressed her. She said, half in tears, half in laughter, that it was worth while being out in a storm to be so cared for, and once, when my father was near her, she lifted his hand and pressed it to her lips.

James was standing by. What made me raise my eyes to his face I cannot tell: the action was an involuntary one; but our eyes met, and I saw his lips curl and his eyes flash, as if he were moved by scorn and indignation. When my glance encountered his he smiled, not pleasantly, then immediately turned on his heel, and with a hasty good-night left the room.

I slept late the following morning. My father gave orders that Nina and I should not be disturbed, and when I looked at my watch, I found, to my horror, that it was past ten o'clock. I dressed in haste and went down-stairs. I expected to find both my brothers gone; they started from the house, as a general rule, shortly after nine; and the sight of James standing in the verandah, with his hands in his pockets, recalled to my mind the unpleasant scene of the preceding night. I peeped into the dining-room: Nina was not there. Then I went up to my brother,

and asked if he had done anything. He said, "I have searched the house." There was a pause—and I shuddered. He added, "I have found no one—yet."

"Then, why not rest?" I pleaded. "Why not make up your mind that it is all right?"

"Look here, Mary"—he turned round upon me abruptly: "*when* everything is right I will make up my mind that everything is right. Do you understand me? I don't intend to be hoodwinked. Call upon Miss Ashley to-day; I advise you. She has a story to tell, and she is telling it."

"Miss Ashley hates Nina, and she has taken a dislike to me of late."

"Miss Ashley is a sensible woman, who has her wits about her. She does not believe in ghosts or witches. If she has taken offence, you have yourself to blame. I told you long ago to be guided by her."

"And so you might tell me," I answered haughtily, "till you were tired of speaking." And I turned away from him towards the house.

"Oh! by-the-by—" he said. I stopped, but did not look at him. "If you are going into the village to-day, call on old Susan Pell," he proceeded.

"Why on Susan Pell? Is she ill?"

"Not ill, only a little upset. She has a strong regard for the family."

Susan Pell was our old nurse, who, when governesses took her place with me, the youngest member of our family, had been established by my father in a little general shop in the village. She had a special affection for me as being her youngest nursling, and she made large demands upon my time. If I did not pay her a visit at least every second day, my old nurse held herself aggrieved. Owing to her connection with the Rectory, her kindly nature, and her comparative success in the mode of life upon which she had entered, Susan Pell was exceedingly popular in the village. Her little back-parlour was a favourite resort after business hours were over; and there was never a betrothal, a wedding, a christening, or a funeral amongst her immediate neighbours, there was scarcely so much as a change in domestic arrangements, a quarrel between husband and wife, or a family scandal, of which she did not hear from the persons principally concerned. With most of these items of intelligence Susan entertained me during my frequent visits; and at these times her young niece, a promising girl, fourteen years of age, was set to mind the shop, while I, sitting in state on the best chair in the back-parlour, with my feet upon the fender, and tea and buttered toast spread out temptingly before me, listened to my old nurse's stories.

"It's right that your father's daughter should know what's going on about here," Susan would say, and this was always followed by a reference to that sainted lady, my dear mother, who had room in her heart for the whole world, let alone a little village like ours. And I must freely confess that in Susan's back-parlour I gained lessons of life worth the learning. It was a kind of window, from which I looked out upon lives whose conditions were wholly different from those in which my life was lived. Quite unconsciously—she was simply telling me facts—my old nurse taught me to sympathise with others. Their circumstances were brought before me, and I began to see that I might help them—not in the mawkish young-lady-like way which too many adopt with the poor, and which I saw from the first was wrong, was ruinous to the independence of the helped and injurious to the character of the helper—not by smoothing away their difficulties and preaching patience sentimentally, but by imagining myself in their place, by thinking out their position with care, by making use of my education and culture in seeking for them the very best method of dealing with their circumstances, and having found it, persuading them to adopt it. I used my small eloquence in preaching husbands' rights and children's mental and moral needs. I painted economy in glowing colours; I tried to lead the toiling and careworn to look outside their narrow monotonous lives, to feel the world's beauty, and the greatness of the universe. I led out parties of young men and girls in the bright evenings of spring and autumn to watch the stars and learn their names, in the summer to gather and classify the sweet wild flowers. These plans and ideas of mine about the poor I always said I owed to Susan, and the pity and love and new comprehension with which her simple true tales of my neighbours inspired me. But latterly I had not seen so much of my old nurse, and it had already struck me that she, who was well-informed about village gossip, might be able to tell me what Mrs. Pike's strange conduct meant, and whether it was really true that the ghost legend had been revived. Even before James spoke I had determined to pay her a visit, and late in the afternoon of this day, when I knew she would be at leisure, I started for her house.

CHAPTER THE TWELFTH.

SUSAN was standing at the door of her shop, looking down the village street. The rays of the afternoon sun shone fiercely on her withered face, bringing out all its wrinkles. It might have been the effect of the strong light, but I thought her eyes looked bleared and dim, as if she had not slept for some time. Certainly she was more serious than usual; she scarcely so much as smiled when she saw me, but she put out her hand, as if in terror that I should pass her door.

"You'll come in, Miss Mary?" she said. "Now do, dearie; it's many a weary day since you've come in and sat down comfortable-like in the back-parlour. I'll not keep you long: tisn't fit that any one should be out after dark these days."

I followed her through the shop, where her little niece was waiting. I thought even she looked paler and more timid than usual, and being determined to know what was said and believed in the village, I began at once to question Susan. What did she mean by her remark about going out after dark? Had anything happened in the neighbourhood? Why was every one in the neighbourhood so mysterious?

She begged me in pathetic terms not to excite myself.

"The fact is," she said, "I don't know what to think, Miss Mary, and there's the truth of it; but the sooner places are pulled down that harbours secrets, be it ghosts, or men, or witches, as the people about here say—but not with my approval, Miss Mary, not with my approval—and the sooner people shows themselves in their true colours, why, the better, I say."

"Susan," I entreated, "do tell me, if you can, what is the meaning of all this disturbance."

"It's your wish to hear everything, exact as it happened?" my old nurse asked, with exceeding solemnity of voice and manner.

"I thought you were sitting in the dark, Susan?"

"Miss Mary, be so kind as listen to the end. It's easy to know the colour of a person's face from their way of speaking; besides, I had the lamp in. And 'Oh! Susan,' she says, 'Oh! Susan'—nothing else, I give you my word, then falls to shaking like a asping-leaf. I was that taken aback, Miss Mary, I didn't know how to move. 'Cry, dear,' I says, 'it'll do you good.' It was my belief, you see, that her little boy had gone off in one of his fits. But when she begins to stare, and puts her hand up before her eyes, as if she was keeping off something, I see it's a different story



"YOU CAN'T POSSIBLY BE AT THE COTTAGE IN TIME" (*p.* 295).

I assured her that this was my desire. She took a chair at the head of her little table, folded her hands in her lap, and proceeded to give me the following story:—

"I was seated in this very chair, Miss Mary, as it might be here, as it might be now: for certain it was later in the day, for I'd just said to Janey, 'It's getting late, my dear; you'd better light the lamp.' 'Twas a week ago or more—yes, let me see: last Friday my sister came from the country: the Friday before—it was the Friday before, Miss Mary, for we was stock-taking, Janey and I, and I was more tired than usual. Well, as I say, I was sitting here, resting my eyes in the dark; there comes a knock at the door, and before I can say, 'Come in,' Mrs. Pike pushes the door open. She was as white as my table-cloth."

she has to tell. We give her some hot tea, Janey and I, and she become a little more comfortable; then says I, 'Speak like a reasonable woman, Mrs. Pike, and say what you've seen.'

"For you see, Miss Mary, I had heard of queer noises going on in the churchyard, and I jumped, natural, to the conclusion that Mrs. Pike had seen the ghost. I felt queer, I can tell you, with a cold down my back, as if it was the middle of winter instead of a warm summer evening."

How impatient I felt as Susan proceeded, in still more elaborate words, to draw me out the exact picture of her own actual sensations and Mrs. Pike's apparent ones! And at last I lost patience altogether, and begged to know at once what Mrs. Pike had seen.

"I'm coming to that, Miss Mary," my old nurse re-

plied. "You'll excuse me, my dear, but I must tell a story in my own way or not at all. Mrs. Pike, as I dare say you know, Miss Mary, living so retired on the common, has to come to the village pretty often, and at all hours of the day. Where there's a young family there's always something wanting. Her road leads her by the churchyard and old Rectory. More than once lately she said she heard sobbings and shriekings, and what not; but she's a brave little woman, is Mrs. Pike, and she took no particular notice. It's one thing to hear, Miss Mary: it's another thing to see. Mrs. Pike declares most positive—she would swear it, she says, in any court of justice—that she wasn't so much as thinking of the noises that unlucky Friday night. She was passing the church as composed as possible, when all of a sudden she sees a white thing by the gate of the Old House. 'You might have knocked me down with a feather, Mrs. Pell'—those were her very words, sitting where you sit now, Miss Mary, and shaking that it was awful to be in the room with her.

"'And what was it like, Mrs. Pike?' says I. I thought to talk about it might ease her mind; but I wasn't prepared for her answer: no, that I wasn't, I give you my word. 'It had the face,' she says, 'of the foreign young lady at the Rectory.'

"'Perhaps it was Miss Nina herself,' says I.

"'It wasn't any living lady,' says Mrs. Pike. 'How can you tell that?' says I. 'Living people can't be seen through, and they haven't dreadful eyes that make you feel sick to look at, and they don't disappear down a black hole in the ground when they've done staring at you,' says Mrs. Pike, quite angry that I should misdoubt her word.

"And, Miss Mary, I did. I said it was wicked to say that the ghost was like our Miss Nina, and I stuck to it through thick and thin, and I stick to it still, though new stories comes pouring in constant about noises and a woman dressed in white, that comes early in the morning and late at night, and when she's looked at goes down all alive into the ground. And every one says she's the face of your cousin, my dear Miss Mary, and it's got about that she's a witch, and can be in two or three places at the same time. They say when she looks at children they waste away. It's all nonsense, my dear; and don't you look so frightened, for we know that the Almighty sends such things as sickness and health, but there's a queer ignorant lot about here, that's always ready to listen to mischief, and they say some night or morning they'll set their dogs on the ghost, just to find out if it's flesh and blood, and see if it'll swim if put in the river late one night."

I started up. "Who dares to say such wicked things?"

My old nurse shook her head. "I can't give names, for I don't know them, Miss Mary; but I've wished days to see you, that I might put you on your guard. I called once or twice, but you were out. If Miss Nina's playing tricks, you tell her, like a dear, that it's dangerous. There's nothing makes people wicked like fear; some one will do her a mischief some day if she goes on, and that would break your poor papa's heart, and mine too, Miss Mary."

She said much more; but it was a mere repetition, with greater detail, of what she had already told me.

I went home, feeling perplexed and frightened. To my great annoyance I found Miss Ashley at the garden-gate.

"This is fortunate," she said. "I wanted particularly to speak to you."

For me to protest was vain. My brothers, Miss Ashley said, had requested her to speak to me. She had something of the gravest importance to say. I must return with her at once; she would send me back in time for dinner.

I knew that, sooner or later, Miss Ashley would have her say, and I yielded as gracefully as I could. For the first time since Nina's arrival I found myself in the little snuggery behind the dining-room, where my aunt's sad story had been told to me. Miss Ashley did not fail to comment upon this. "Old friends are forgotten in infatuation for the new. The young are more attractive than the elderly," she said. "That is natural. I don't complain; but whatever you may feel towards me, I take an interest in you, Mary, always for your dear father's sake." And she sighed deeply.

I murmured my thanks.

"And because I take an interest in you, I am sorry to see you weak and foolish. I blame you more than I do your brother Eugene. He is an enthusiast, and it is only too sadly evident that what I feared has come to pass. Your cousin, for her own purposes, has cast her spell over the poor boy. He is blind."

I sprang to my feet. Excited as I was, it was impossible for me to listen calmly to these insinuations. "Miss Ashley," I said, "if you do not tell me in plain words what you mean, I will leave your house at once."

She smiled her smile of superior knowledge. "Sit down, my dear child, sit down. You wish for plain words; then you shall have them. It was my plan to break it to you by degrees, but since you are so impatient——"

She paused; there was a sinister light in the eyes which she fixed upon me; I believed her to be full of suppressed fury. "A man is living in the old Rectory," she said quietly; "he is a musician. The sobs and shrieks the villagers have heard come from his violin. Your cousin Nina supplies him with provisions, which she takes from your father's house. She visits him every evening and every morning."

"It is false!" I cried out with indignation.

"*Is* it false, Mary? Will you assure me positively that you have not had some suspicion yourself?"

My heart began to throb violently.

"I have no suspicion," I said. "I could not possibly imagine that Nina would act unworthily of herself or of us."

"Poor child! poor child!" murmured Miss Ashley, and she added that it was inconceivable, perfectly inconceivable. She had heard of men being infatuated by women: such cases came within the experience of every one; but for a girl to cast such glamour over the eyes of another girl, this, she confessed, was something new to her.

"And I thought I knew the world," she went on, looking at me critically through her double eye-glasses, as if I had been a new botanical specimen. "Well, live and learn. Now, Mary, my dear, listen to me. I have a certain amount of experience, though I happen not to have met before this with a young lady so sweetly innocent as you"—Miss Ashley was beginning to give way to her temper—"and I tell you that I have heard of strange things happening now and then. Your eyes flash. Try to keep your temper, my dear child. I am accusing your beloved cousin of nothing. We will say that she is a most admirable girl, high-minded, courageous, and full of a young lady's generosity, which, remember, is apt to be sentimental in its character. You would not object to my giving this description of her?"

She waited for an affirmative answer, smiled graciously, and went on.

"Now, generous young ladies—who are also secretive——Do you object to the word? Then I will ask you if you have found your cousin open and frank?"

"And I answer that you have no right to question me."

Miss Ashley smiled. "It needs small experience, dear, to know what such an answer means. Pray be calm; I shall reach my point presently. Generous and secretive young people run serious risks. Oh! I assure you I have seen it more than once. Their kindness of heart leads them astray. Your cousin Nina was brought up on the Continent; now, let us say—remember this is merely guess-work—that she met in her childhood one of those interesting individuals who call themselves patriots. In Italy, France, and Russia they are to be found in abundance. Say that your cousin was impressed by the disinterested enthusiasm of the patriot; you grant that this would be possible?" I bent my head.

"It would also be possible—perhaps you will not grant this—that a very young girl might be mistaken."

"Of course I grant it."

"Oh! I am glad. So far, then, we are of one mind. I want you to suppose next that our patriot—who is really no patriot, but to whom your Nina has told all about herself—falls into some very vulgar trouble: thieves, wounds some one in a brawl, or is forced to run away from his creditors. Would it be very wonderful that he should think of his little English admirer? Not at all, I think. Well, then, if so, the whole thing lies in a nutshell. Nina sees him, thinks of the Old House, recommends him to force an entrance, and promises to supply him with necessaries. This is my theory, Mary; if you will believe me, it is not an uncharitable one. There are those who say worse things."

I answered that nothing worse could be said, and Miss Ashley urged upon me the duty of forcing myself into Nina's confidence. "For the sake of your father's position," she said, "there ought to be as little scandal as possible. There cannot fail to be some."

I could not answer as indignantly as I would, for Nina's conduct had really been mysterious, and was mysterious still. Thus I justified myself for what I called my lack of spirit, as, having stoutly refused the escort of Miss Ashley's maid, I walked home alone across the churchyard.

It is easy to be brave in warm and cosy rooms, with commonplace furniture around you and a well-known voice uttering commonplaces in your ear. In the lonely churchyard, tenanted with its voiceless dead, the limbs of a dark yew-tree shutting out the radiant west, and the rugged walls of a haunted house frowning above you, it will be strange, I think, if a certain sense of awe, which can neither be fought down nor reasoned away, does not take possession of you.

This, I am free to confess, was my predicament that night as I turned into the churchyard, and, but that Miss Ashley had offended me too deeply, I would have turned back, and at this last moment accepted the escort of her good-tempered maid. My pride prevented me. There was even a kind of support in it, and antidote to fear. I was exceedingly fortunate also in seeing at the stile, where, as I have said, a gloomy darkness seemed always to rest, a face and form that were delightfully familiar to me. So great was the relief that I stood still and began to laugh. Then the whistling which had drawn my attention to the figure on the stile ceased. "This you, Miss Winstanley?" said my friend Horace—for he it was—lifting his cap, and jumping down from his seat.

"Horace," I said, laughing still, "if you begin to play at this kind of thing, ghosts will lose all their repute."

"But what makes you think I am playing at ghosts?" he asked.

I answered by requesting to know what brought him there at such an hour. "Your uncle and aunt," I said, "dine at six. You can't possibly be at the cottage in time."

"They don't expect me," replied Horace coolly.

"Then, where do you mean to dine?"

"Here."

"On the stile?"

"Yes; I have my dinner in my pocket."

"Now, Horace!"

"Now, Miss Winstanley."

"But you know this is absurd."

"Begging your pardon, I know nothing of the kind. Look here, Miss Winstanley"—he came quite close to me, and spoke in a low eager whisper—"you're anxious: I read it in your face; so am I. Don't interrupt me, please. We both know that *she* wouldn't do anything wrong—no, I don't mean that exactly. I mean she wouldn't do anything that wasn't wise, for she is as clever as she is pretty."

Yes; I had this conviction too. As Horace spoke I found it full-formed within me. Nina was not the romantic, foolish, sentimental girl whom Miss Ashley had painted. Once I might have thought her so; but in these latter days, the gravity of earnest purpose and a woman's gentle wisdom had sat upon her brow and shone in her steadfast eyes.

"But," Horace proceeded, "every one doesn't know her so well as you and I, Miss Winstanley: that's the reason I've come here. I shan't put myself forward. I'm a boy, and she's a woman: I shouldn't presume to

give her my opinion. I won't even let her see me, if I can help it; but I mean to be here, and then, if any one attempts to interfere with her, why, I fancy I can let them know all about it. They're sure to be cowards, you know."

When he had spoken Horace took his place on the stile again, and while I stood speechless, began whittling at a stick with his knife, and whistling under his breath, as if his piece of modern knight-errantry were the most ordinary thing in the world.

"You'll be late for dinner if you don't make haste home," he said presently; and then I found a voice, and told him what I had heard that day. I could not bear the idea, I said, that be should be left alone to face the danger—if danger there were. He only laughed, and asked if I did not know he was a soldier. I proposed to get a man to watch with him, but this made him extremely indignant. "I hope I'm not a sneak," he said; "and it would be like a sneak to get an inkling of her secrets and go and tell any one else. I wish I hadn't let you know, only you looked so anxious. I thought it might relieve your mind a little to know I was here. It'll be a bit of fun, that's all—a lark, that I shall think of when I'm far away. Now you go, Miss Winstanley, please, and don't say a word about my being here."

"I shall try to dissuade her from coming at all," I said; and he answered that there I must please myself. He would remain where he was, he assured me, until ten o'clock that night.

I went back to the house. My two brothers—I was somewhat relieved when I heard this—were dining out. James, when he heard I was in, sent for me to Eugene's study, and advised me strongly not to allow Nina to go out even as far as the garden. He expressed himself as much annoyed at being obliged to go out. Had not the engagement been an important one, he would have put it off. I asked him if he had mentioned the occurrence of the previous night to our father. He answered, "No; and for several reasons. I did not wish to disturb him unnecessarily," he said; "and I have taken a fancy—a foolish one it may be—to find out about the thing myself."

I observed satirically that the latter motive was probably the stronger of the two, but James took no notice of my remark. After that, my father and Nina and I dined together quietly. Our dinner was rather a sad one; a heavy sense of depression seemed to rest upon us all, from which we tried in vain to rouse ourselves. My father, I could see, was anxious, and I was not surprised to hear him say, *apropos* of nothing particular in the conversation, that his people had surprised and disappointed him. "A wave of superstition," he said, "seems to have passed over the village; it is most extraordinary. It centres round the Old House; no doubt the whole thing could be easily explained. Some silly woman has seen a shadow, which she takes for a ghost; she tells the neighbourhood, and if people do not see the same themselves, they fancy they do. But it is disappointing. I thought my people were more enlightened." He sighed as he spoke, and shortly after—for dinner was just over—he went to his study. Nina got up to leave the room. I asked her where she was going. "Be persuaded," I said. "Stay in-doors this evening. Indeed you are not wise."

She answered evasively. I pressed her. "Nina, for my sake! I am so much alone now."

She said, "But I promise to be away no longer than half an hour."

I grew indignant with her for her persistence. "You ought not to go," I cried out. "I will prevent you."

"How?" said Nina, her colour rising.

"I will speak to my father."

"If you do you will lose me."

"What do you mean?"

"I mean what I say, Mary." She took my hand in hers lovingly, and her large lustrous eyes, which to me seemed innocent and truthful as those of a young child still ignorant of evil, were fixed on my face.

"You have trusted me," she murmured, "under what difficulties I know. Eugene has trusted me too. I know that nothing could shake *his* trust. If he were here, he would tell you to let me go. Mary, do you trust me—a little longer; I hope it will not be more."

And while I was hesitating, while her plaintive words of appeal were still sounding in my ears, I saw that I was alone. Nina, as usual, had taken her own way.

The hour that passed was a dreary one. My father remained in his study; the house was very still. I sat in the drawing-room, my little table, with the lamp on it, drawn to the open window. I was listening for every sound. When I thought of those two young creatures out in the dark, with, it might be, angry people about them, I felt guilty and ashamed. Surely I might have done something. The clock struck nine. I was on the point of ending my suspense by rushing out myself to the churchyard, when I heard the rustling of my cousin's dress among the bushes. I called her by her name. "Thank God, you have come home safely!" I cried out. She came near the lighted window, and I saw now that she was very pale, and that there was a look of horror in her eyes. I could not speak. Then she came in, walking slowly, like one in a dream. I breathed a frightened inquiry. She sank into a chair, murmured, "Thank God! yes, thank God!" and burst into a fit of weeping.

END OF CHAPTER THE TWELFTH.





Sweetly are the Wild Birds Singing.

Words by EDWARD OXENFORD. *Music by* J. GORDON SAUNDERS, D.Mus., Oxon.

VOICE.

p

1. Sweet - ly are the wild birds sing - -
2. Ah! how long ere pa - tient wait - -
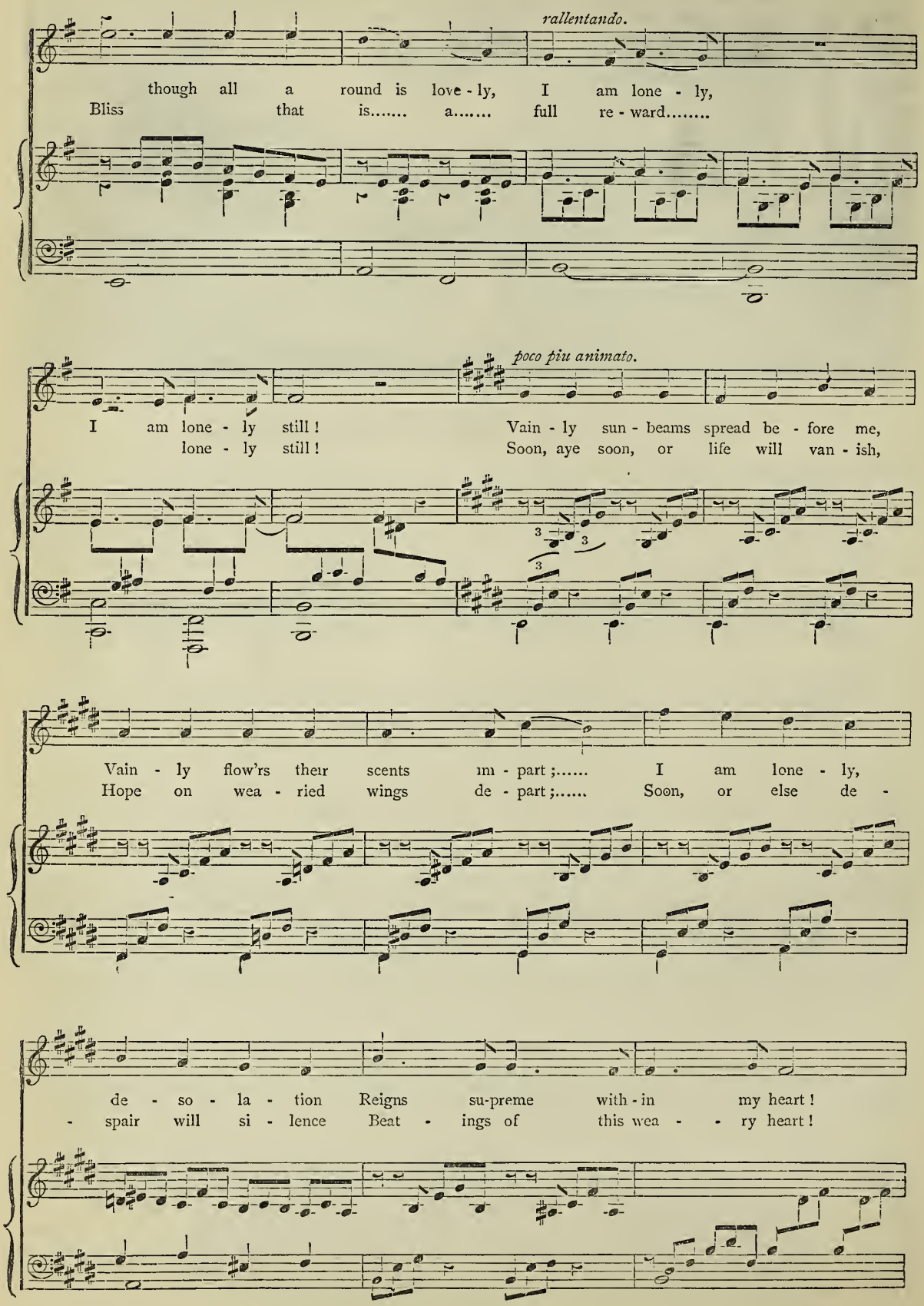
Andante e piano.

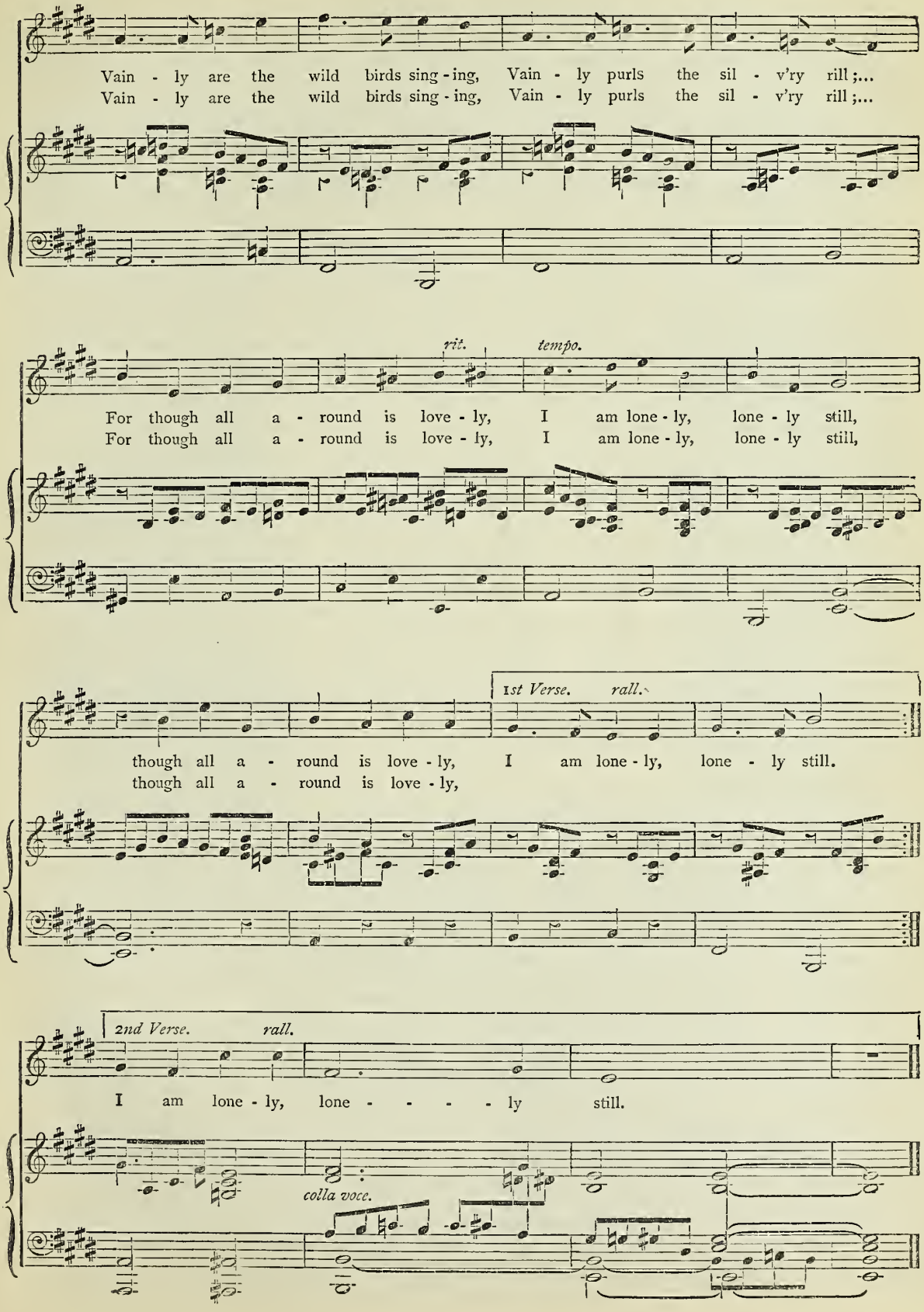
PIANO.

pp

- ing, Soft - ly purls the sil - - - v'ry rill,
- ing, Wait - ing that to bear..... is hard,

Yet, though all a - round is love - ly, I am lone - ly,
Finds in love that can - - not al - - ter,


rallentando.
though all a round is love - ly, I am lone - ly,
Bliss that is..... a..... full re - ward.....
poco piu animato.
I am lone - ly still!
lone - ly still!
Vain - ly sun - beams spread be - fore me,
Soon, aye soon, or life will van - ish,
3
3
3
Vain - ly flow'rs their scents im - part;..... I am lone - ly,
Hope on wea - ried wings de - part;..... Soon, or else de -
de - so - la - tion Reigns su-preme with - in my heart!
- spair will si - lence Beat - ings of this wea - - ry heart!


Vain - ly are the wild birds sing - ing, Vain - ly purls the sil - v'ry rill;...
Vain - ly are the wild birds sing - ing, Vain - ly purls the sil - v'ry rill;...
rit.
tempo.
For though all a - round is love - ly, I am lone - ly, lone - ly still,
For though all a - round is love - ly, I am lone - ly, lone - ly still,
1st Verse.
rall.
though all a - round is love - ly, I am lone - ly, lone - ly still.
though all a - round is love - ly,
2nd Verse.
rall.
I am lone - ly, lone - - - - ly still.
colla voce.

GARDENING IN APRIL.



ONCE again we find ourselves in eager expectance of the great transformation scene of nature. Did we ever before so ardently long for it as now? Two or three days before Christmas, 1880, the thrush and the blackbird were in full song, the butterflies were sailing about over our heads, and we were beginning to anticipate an unprecedentedly mild winter; but how great was our undeceiving, two or three weeks later on, when we found ourselves practically inhabitants of the Arctic regions! Probably such an illustration of the enormous vicissitudes of temperature to which we are exposed in these islands has never for very many years been known. Indeed we shall not, until another couple of months have gone, fully and with any degree of certainty ascertain the extent of the damage done to our outstanding ornamental shrubs and evergreens upon our lawns and elsewhere. Great havoc, we recollect to our cost, was wrought amongst these in the two preceding and terribly severe winters, and it is to be feared that January, 1881, gave the fatal and finishing stroke to our more weakly and already degenerated shrubs.

And yet we have no intention either to grumble or despair. Whether is it the more childish or profane to exercise ourselves unduly because of the severity, or what we are sometimes and most illogically pleased to call the unnaturalness, of the seasons? In any case, however, our business is with the present month of April.

Now there is one subject upon which a few words may just at this time be aptly said with advantage, but upon which, as far as we are aware, we have hitherto kept silence, and that is the method and process of grafting. And not only is our subject an interesting, instructive and important one, but it is, as we well know, venerable and time-honoured. St. Paul, we recollect, freely illustrated from grafting, while, nearly 400 years before, Demosthenes adverted to it; Plutarch and Pliny alike mention it, although the latter would seem to have had but an imperfect knowledge of the principles of grafting, since he assigns as a reason of the production of some apples that were of an unusually rosy red, that originally they had been grafted upon a mulberry stock; whereas we know that our stock, or wild tree, in no sense affects the piece that we graft upon it, least of all does it colour the fruit! The stock, in fact, merely supplies nourishment, and that is all. Now it may probably be asked, What object is there in the system of grafting? What advantages do we gain by it? They are many, as we shall presently see. If we depended merely for the increase of our garden supply upon cuttings, we should be in a sorry plight, for it would be years before any subject raised from a cutting could be of any practical use; whereas, probably the self-same cutting, if grafted successfully upon a sturdy and healthy stock, might in a couple of years' time result in a tree. Our first advantage, then, from the system of grafting is that the entire strength of the stock is thrown into that which is grafted upon it. And next, we are by this means evidently able to increase any choice class of fruit with comparatively no difficulty, as a piece with a single bud upon it is sufficient for a graft, if a promising one. Then again, when we have ascertained what are the growing properties of our stock, that is to say, whether it is very vigorous or not, we can either increase the vigour of any more delicate kind, or reduce that of the grosser of any species of fruit that we are wishing to propagate, simply by grafting our delicate sorts upon vigorous stocks, and our rapidly growing or vigorous cuttings upon our less vigorous stocks. The cutting, or piece, that we graft upon our stock is commonly called the scion, apparently a word of French extraction, signifying a young twig or shoot.

Now, of course, in all our observations upon gardening, we for the most part assume that a uniform and systematic attention is paid to the garden throughout the year, otherwise it must be apparent that any hints that we have given, if only followed up by fits and starts, can only result in failure. And in our present subject of grafting, for example, we can at once see how futile it would be to be suddenly seized with the idea of grafting, without reflecting that this first necessitates the possession of some stocks in a good growing and healthy condition. New stocks for grafting can be propagated by seeds, layers, or root-cuttings. Perhaps, as a rule, root-cuttings are preferred; yet by the end of February we may, if we like, sow the seeds of apples and pears for our stock; generally, however, we prefer crab stocks for apples, and those of the quince for pears. Or, again, portions of the root of the plum we may plant out now, to serve us afterwards for stocks on which to bud peaches, &c., while seeds of the cherry may also be sown for the purpose of raising stocks for our cherries. And a stock is perhaps first fit for use when it has attained the size of a good thick lead-pencil.

It must be evident, however, to any one that the endeavour to raise any stocks from seed-sowing merely is by far the longer process, as some three or four years must elapse between your seed-sowing and your grafting upon any stock thus attained. From the woods, then, where practicable, grub up stocks in the wild state—crab stocks, or the wild cherry—or save from your wall-trees those young suckers and shoots that always make their appearance at the base. Stocks thus obtained will be fit for use a year after they have been planted out in your garden, for they must, before they can be capable of nourishing your graft, be themselves well rooted, and in a healthily established state. Thus much, then,



for the stocks. There are species of the willow, by the way, on which the plum can be grafted. Now the best time for grafting is in the spring of the year, before the buds start for any real growth. Next, as to the scion, or twig, that we wish to graft upon our stock. We have said just now that a single bud upon the scion is sufficient, but perhaps it is wiser to employ one that has some three or four upon it, while all the better if there be one bud near the end of your scion at the point of junction with the stock, as it may help in their union.

Perhaps as good or as simple an illustration of one process of grafting —for it should be remarked that there are several methods employed—is that afforded by the splicing of a broken walking-stick or fishing-rod. We are careful in this instance to join the broken pieces together with great exactness. Or let us suppose that we wish to

add a piece to our stick or rod: we should cut a fairly long slope in the stick itself, and a corresponding slope in the piece that we are about to add to the stick, and then carefully glue them together and bind them with fine cord or string. Now this, it is unnecessary to add, with the exception of the glue, is what we for the most part do when grafting. And this process would be called side-grafting. On the surface of junction be careful to avoid allowing any little particles of dirt or grit to accumulate; do not injure or hack about either your scion or your stock, and let the bark of one exactly fit to and meet the bark of the other. Fit them together then, and first bind the scion to the stock with a piece of bast matting—string will never do. And here again some judgment is necessary. We must not bind too loosely or the pieces will not exactly fit together, but would wabble about, and this would be fatal to our process; nor must we bind them so tightly as to make it impossible for the nutritious qualities of the stock to circulate through—shall we say the veins of?—the scion. And, lastly, we surround the whole junction with clay, and some put over the clay a little moss to keep the whole moist, and again bind carefully round with matting. Or, instead of the clay, you can buy at any nurseryman's a preparation called grafting wax or clay. Various recipes for this compound have been given, but it is better to buy some outright than to make the experiment of preparing it yourself, unless you prefer using clay, which perhaps, now that our knowledge of the properties of grafting has improved, it is as well not to do, since we can so readily buy some well-recommended preparation. But there are other methods of grafting. We will briefly advert to one or two of those most in use, in addition to that already described. With a keen knife—and, by the way, never use a jagged or blunt one—cut a small cleft a little way down the scion, and cut also the top of your stock into a sort of wedge shape, *so* cutting your wedge as to make it fit neatly and exactly into the little cleft or ravine in your scion. When placed together, you will notice that the scion goes over the stock somewhat in the way that a saddle goes upon a horse, and hence this process is called "saddle-grafting." And here, again, be careful at least on one side to let the bark of the scion touch—*i.e.*, exactly meet—the bark of the stock, bark to bark, and bind round as before with your matting, wax, or clay and moss.

There is another process of grafting very much in use, and which might perhaps be described as the converse of the one just named. It is called splice, or tongue, or whip-grafting. In this case it is the scion that is the wedge which fits into a corresponding cut made in the stock, and all possible care is again taken to make the bark of the one as exactly as possible meet the bark of the other. Other varieties of grafting it is perhaps not very much to our purpose to describe. The length of our grafts or scions should be some five or six inches, and the tree from which these little slips or cuttings are taken should be of the same family as, or have at least some relation to, the stock. Now of course we are always anxious to propagate the choicest, best, and most fruit-bearing kinds, and in order to do this it may be that we have been at some pains to go a long distance for our slips or scions. And if this be the case, or if some time has to elapse between the removal of these twigs from their parent tree and the grafting them on to the new stock, keep them stuck in a little sand or earth; some have even suggested sticking them into a potato. But with care they can be kept a week or two, or even longer, before being grafted. But be on your guard against frost. Indeed it is hardly necessary to say this. We have so often remarked that the knife and the frost must never go together, nor must the scion when once removed be exposed to frost. Before, however, concluding our subject of grafting for the present, there is one other interesting process known as "in-arching," upon which it may be well to say a few words. This process is really grafting without removing the scion from its parent tree, until it is actually united to the new stock. We do not mean that *immediately* after the junction has been made by the gardener the scion has to be separated from its original stock. This separation does not take place for some months after the process of in-arching. It will be at once apparent from this, that the two young trees to be thus joined together must either be at the outset in close proximity to one another, or else that the one from which you intend your graft to come must be growing in some tub or good-sized flower-pot, which you would have to carry to the tree that is growing out in the open. When the time comes, however, for the removal of your scion from its parent tree, which is perhaps some four months or more after the in-arching process, be careful how you go about it, knife in hand, and that hand a steady hand, and that knife a sharp knife, or the probability is you will detach your scion from its stock. Give a sloping cut downwards; and probably it may be necessary to remove the old clay and bind round afresh with new clay, so as again thoroughly to maintain a moisture round the point of junction.

We have left ourselves but little space to say much upon our general gardening operations in this busy month, but the subject which has been engrossing us is an important one, as well as opportune to the season of the year. It may be that we are still having an eye to the perfecting of the level of our new tennis-lawn. For this, of course, while it is well to roll the grass after rain, yet on the other hand to do so very soon after a *long* wet season, or when a thaw has set in after a lengthened frost and deep snow, and the whole surface of the ground is what is termed rotten, to drag the heavy iron garden-roller over the lawn would probably do more harm than good, and give you afterwards an infinity of trouble to repair the mischief you have done in drawing long holes and hollows all over your grass.

Our tulips and hyacinths are now in full show. When their heads of flower are heavy, do not neglect to give them some support, or a sharp hail-storm or heavy gale of wind might in a single hour break them

all off short, and level them all with the earth. Pansy-beds are always gay. They, when some little pains are bestowed upon them, repay us by their prolonged display, and are really as inexpensive as most things; whereas the hyacinth and the tulip soon fall away after being a short time in flower. Pansy-beds, then, may be formed by planting out the struck cuttings every fortnight. In our greenhouse this is the last month before our bedding-out operations are begun, and consequently a month as difficult as any in the year, in one sense, for us to contrive to get through, for we feel ourselves more than ever cramped for room. Give them all the air you can, for should we not feel compelled to do the same in a crowded ball or assembly-room? And in the kitchen garden perhaps, fearful of frost, we have delayed putting in our potatoes until quite the end of March. Perhaps this is an error on the right side, for of late years our seasons are certainly later than they used to be. We are paying, too, the usual attention to our hotbeds. If they were put up in the middle of March, which is quite soon enough, a sudden return of the cold will make them decline in heat, and we may have to go to the expense of lining them with fresh manure.

Fairly embarked, however, as we now once again are in the spring, let us not anticipate disaster, saving only by being prepared against sudden changes of temperature. The cuckoo is busy only in voice, but the bees are more practical in their work. Let us take example from them, rather than from the idle bird who takes a house ready furnished by some other of the feathered tribe.

ARTISTIC FURNISHING FOR MODERN HOUSES.

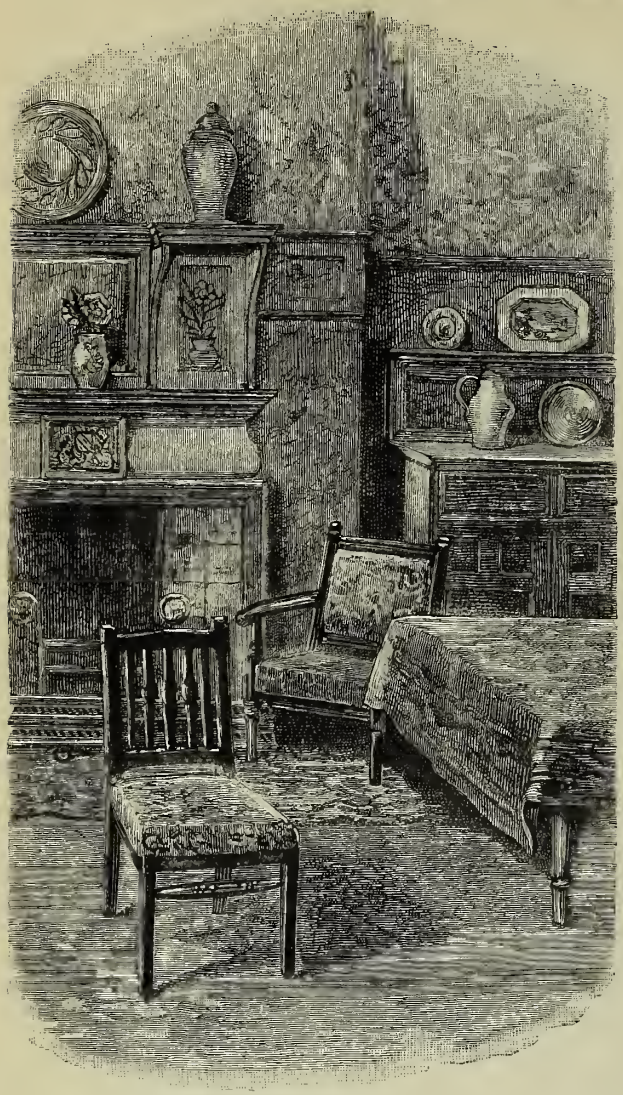
FURNITURE.



IN our last paper on the subject of art furnishing we left our dining-room complete as to walls, ceiling, and floor, and we must now proceed to furnish it. In selecting the furniture there are one or two elementary principles which, applying to furniture generally, will come in as well here as later on; thus carrying out the same system as with the wall decoration, *i.e.*, discussing the general principles first, and afterwards applying them to the particular cases in question. In the first place, all thoroughly artistic furniture must be *constructively true*. This is a point which, curiously enough, seems to have been very generally lost sight of for nearly two centuries. Although some of the furniture designed and constructed during the lapse of this long period has been magnificent, picturesque, richly carved, refined in line and proportion, and so forth, very little indeed of it has possessed the one cardinal excellence of constructive truth. It will take us too far from our immediate subject to attempt to analyse and illustrate this quality thoroughly, but we may shortly explain that it is exigent of the use of each material in its own natural and legitimate manner, and that the construction, *i.e.*, the way the article is made and put together, shall be expressed, or at least not disguised.

Ever since "design," by persons other than the actual artificers, has been intentionally devoted to objects of utility with the view of making them beautiful, it appears as if the material of which they were to be composed has been almost universally lost sight of. This is true not only of work arising out of the Rococo and cognate styles—nothing better could be predicated from the offshoots of such extravagance—but it also holds good with many of the most admired pieces of what are generally considered to be the purest styles. Hidden or disguised construction is a common fault even in these. Take for example many of the fine old chests of drawers and cabinets, whether Dutch or English, going generally under the name of Jacobean. It will be often found that the fronts are apparently divided into three divisions by upright styles or pilasters, thus suggesting that the drawers or doors are short, and extend only between the uprights. On opening them, however, it is found that they extend the full width of the chest, the apparently dividing style being merely planted on the front.

It may be objected that this severe exaction of constructive truth is the cry of the purist alone, and that if practically enforced it would lead to a dead level of monotonous forms. This is not the fact, as innumerable instances which might be adduced to the contrary would amply prove; at the same time, it is fair to allow, that like other good principles, it may be pushed too far. Room must always be left for the play of individual fancy, if not for caprice, but it is at all events safest to commence, in art as in morals, with the highest and most perfect aspirations, even if



practical requirements compel us to be satisfied with something short of the ultimate perfection aimed at.

For illustrations of the meaning of constructive truth we need not go far. For examples of the positive side of the question in modern houses we shall generally have to go down into the kitchen. There in the plain deal table, the dresser, with its shelves above, and its slab, and drawers, and pot-board below, and in the Windsor chairs, we shall see wood used in its legitimate manner, and the mode of construction apparent and undisguised. Add a little refinement of detail, and let the proportions be carefully studied, and furniture on the same lines would be suitable anywhere. Added luxury in materials and finish, it must be remembered, is apart from all questions of art. It is not suggested that they are not desirable qualities in themselves when well applied, but the increased value they give to the original article is entirely separate and extrinsic from its artistic value.

In illustration of the negative aspect of our position we have but to go up into the ordinary drawing-room fashionable a score of years back. Here, in the wood-work, the designer's ruling idea seems to have been that his material was especially fitted for curved forms, and in few of the pieces of furniture shall we find a straight line or, excepting in the table-top, a level surface. As to the mode of construction, it goes without saying that true wood construction in such forms is impossible. Iron knees, screws, dowels, and glue are the aids by which the material is tortured into the "elegance" of its finished perfection. It is a healthy symptom that comparatively few drawing-rooms are as bad nowadays as they were; but even now it is sometimes difficult to convince people that straight lines are not ugly *per se*. Nature is always quoted, and certainly much of the beauty of form in natural objects consists in the delicacy and subtlety of their curves; but nature has no abhorrence of straight lines. Take a fir-tree for example; its natural growth is undoubtedly upwards in a vertical, straight line. It is but the accidents of soil, of light, or wind that bend it into curvatures this way and that. In fact, a misplaced curve, however beautiful it may be, is more offensive to a trained eye than the apparent monotony of appropriately straight lines. There is, however, danger lest we rush to the opposite extreme, and exclude curved lines altogether. This would be also wrong. The use of straight, or nearly straight, lines for the constructive parts of furniture does not at all preclude curved forms in positions and in materials suitable for them. In wood construction there is abundant scope for curves, especially in turned work. The reason why wood construction should generally be based upon rectilinear forms is obvious when we consider that wood is a material which may be described as consisting of bundles of fibres, generally straight, of considerable strength in the direction of their length, but depending for the lateral resistance of the mass upon the cohesion between the separate fibres. This cohesion of course varies greatly in value in different kinds of wood.

In pottery, on the other hand, excepting in tiles, squareness and straightness are generally offensive; the material lends itself in process of working so much more readily to curved forms, and is when baked a rigid, inflexible, and grainless mass, equally strong in all directions. So, too, in wrought metal work, the rods or plates of which it is composed can be readily and naturally bent or beaten into curved forms without impairing their strength.

A good many of us, nowadays, pin our faith upon *old* furniture as being artistically better than modern. This is only true in a limited sense, and has been so generally accepted only because the style of furniture now happily going out was so bad in every way that it happened that most of the old pieces that could be raked out were in some respects better than the new. But it is not going too far to say that now, with our present lights, we of the present day are capable of making, and do sometimes make, furniture better in design, and equal in workmanship to anything that

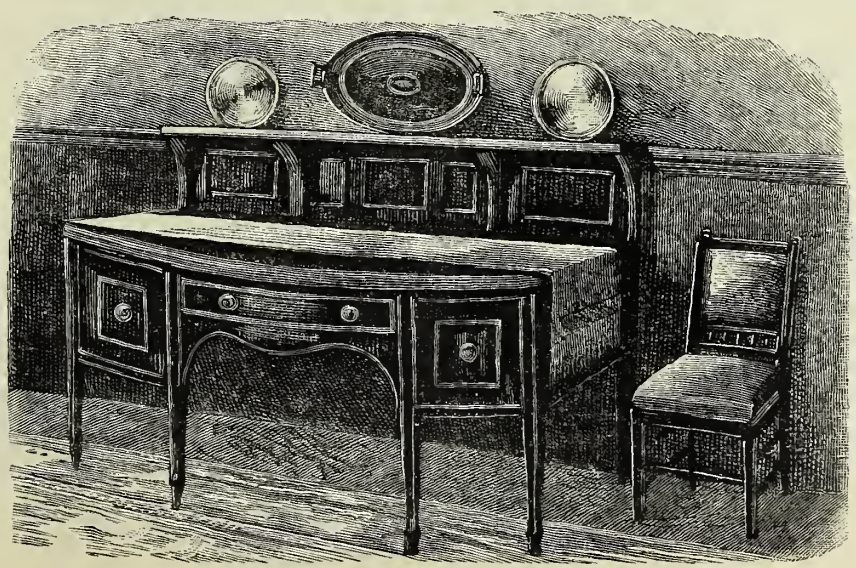
has been made for centuries. It is therefore, I think, to be regretted that some of our high-class cabinet-makers are devoting themselves to reproductions or imitations of Chippendale and Sheraton furniture, as well as furniture designed by the brothers Adam; which latter, though possessing what Ruskin called, in criticising Claude's landscapes, a certain "foolish elegance," is quite without constructive truth.

Of course all old furniture—such, for instance, as any of the pieces of the celebrated makers of the eighteenth century—is interesting and valuable. But its interest and its value belong to antiquity, and not to its own intrinsic art-merit. It is delightful and interesting, no doubt, to use a chair dating from say 1754, to linger over the wonderful finish and thoroughness of its old-world make, and to call up the associations connected with the times during which it has been in existence; but these are the pleasures of the antiquary, not of the art-lover; and it is, perhaps, largely owing to the fact that artists are nearly always antiquaries too, that the confusion has arisen. As Mr. E. W. Godwin has pointed out, it is no true way of encouraging the growth of a pure style in modern work, to fill our houses with old stuff raked out from the stores of the curiosity-monger. Therefore to those who can afford it I would say, have your furniture made to order by some cabinet-maker of intelligence from your own designs, or from designs made by an expert who has made furniture designing a special study. In London too, there are a few makers of artistic furniture solely, where one can be tolerably sure of finding nothing offensive. The cost of the furniture is, however, generally in excess of that of ordinary furniture dealer's articles of the stereotyped forms; and, while the demand remains limited, it must necessarily continue to be so. Attempts have, however, lately been made to produce soundly-made and truthfully-designed furniture at lower prices by means of economy in elaboration and finish. Whether these undertakings will be ultimately successful depends upon the extent of the spread of pure taste among the middle classes.

It is scarcely necessary to warn people against the black and gold abominations displayed by most of the ordinary cheap furniture dealers as a tribute to the growing appreciation of artistic (?) work. These, because some of the earliest examples of the revival of good furniture happened to be in the style called—I know not why—Early English, are always so dubbed at the shops. They are almost always bad in design, flimsy in construction, and vile in decoration, and, though nominally cheap, would be dear at any price.

What then is left for unfortunate art-lovers who are not rich enough to bespeak or to buy good artistic furniture, and who are warned against the purchase of cheap imitations of it? On the principle that all things come to them who know how to wait, I would counsel them to restrict the number of their purchases, buying but little at a time, but seeing that that little be good. If you have a thing made, get it done at a carpenter's shop. Do not expect expensive woods. Birch and beech are good enough for all ordinary purposes. They can be stained black, dark oak colour, or green, and if well rubbed with linseed oil, not only when new but every week, the furniture will at last take that soft, dull polish which is so agreeable to look at, and to feel, and is also very durable. Carving, too, is better avoided. If well-done it is expensive, if ill-done offensive. Turning, on the other hand, is cheap, and if well-designed adds lightness, and is a valuable and legitimate decoration.

Moreover the furniture-broker is another occasionally very useful resource. I do not mean the professed antique furniture dealer. *He* has customers able and willing to give much higher prices than we can afford, and without special knowledge one cannot be sure that what we buy is exactly the thing it looks like. I mean the genuine old and poor furniture broker, who often has an old chair, chest of drawers, card table, or what not, out of repair, and



perhaps not over-clean, which he will sell you at a small advance upon his own expenditure on it. The purchase made, a few shillings expended on it (if home talent is not available) in the way of reparation, cleaning, and repolishing, and you will probably have secured what is so dear to every one, namely, a bargain. Every day, however, those bargains become harder to procure. The principal dealers in antique furniture have emissaries continually going the rounds of the old shops, ready to buy up all the really old furniture the broker can collect ; and thus the latter, in his turn, becomes aware that there exists a market whereat fancy prices may be secured for such things.

Some of the old things thus picked up will be interesting and valuable as old furniture, while for usefulness and artistic merit many of them will be, although seldom theoretically perfect, yet a great advance upon the ordinary forms of modern furniture.

Leaving these general considerations we must hasten to return to our special task, that of furnishing the dining-room. A difficulty confronts us here on the very threshold. We *must* have a table ; we want one that will serve us without inconvenience when we are alone, or with the normal family circle around us, and at other times will accommodate an additional number of sitters. The ordinary telescope table is very unsatisfactory ; when closed it is clumsy and heavy; when opened out, weak and disproportioned. Its mouldings are generally coarse, and the turning of the legs gouty and preposterous. Is there any real necessity for such a pantomimic piece of furniture? I think not, and for this reason, that even those who use such tables seldom make use of the power of varying their length. They somehow get settled down into an ordinarily convenient length, which is enlarged only upon such special occasions as weddings or other exceptional gatherings. A table which will comfortably accommodate eight or ten persons is most generally useful, and is not too large for a smaller number ; upon the special occasions a table with flaps may be added at one end, with one or both flaps extended, according to the number of additional sitters. This flapped table will usually stand in one of the recesses, and when not in use for dining purposes will be useful for an additional sideboard. For the model of the permanent table the ordinary kitchen table will serve, with a little refinement in the legs and framing, and the drawer, of course, omitted. With our present custom of keeping the cloth on throughout the meal, it would be extravagant and unnecessary to have elaborately-moulded edges or carved framing. In view, however, of a change in fashion in this respect, while the skeleton remains the same, suitable decoration in the way of moulding and carving may be adopted, where means, and the degree of sumptuousness in the style of furniture otherwise prevailing, will render such richness appropriate. For the style of this decoration, if the table be in oak, nothing can be better than an adaptation from the Jacobean furniture. The corners of the top should be well rounded, and the surface, of course, simply rubbed with oil, not polished.

The cut on page 305 is an example of a very common type of eighteenth-century sideboard. This kind is still sometimes to be met with at the old shops. When with square, tapering legs, they are generally older than with turned and fluted legs. Very little inlay was originally used ; what there is consists usually of bands and lines only. These modest and refined pieces of furniture are now often caught up, and the surfaces almost covered with loud and common marqueterie, greatly to their detriment. Originally there was no back, but only a brass rail supported on four brass upright rods. This arrangement was probably meant to hold a curtain so as to save the wall behind from the contact of dishes and so forth. The brass columns sometimes also supported candle-sconces. In our cut a light framing, with narrow shelf at top, has been suggested as a convenient addition, serving to display a few plates or salvers, and an old wooden tea-tray, at the same time leaving the top of the sideboard clear and free for its legitimate purposes.

CHAS. W. DEMPSEY.

THE LIGHT OF HOME.

WITHIN the home she rules with quiet might,
By virtue of her perfect womanhood :
A child in years, but with all grace and good
Enshrined in her truth-flashing orbs of light :
A woman strong and firm to do the right,
Who with the old-time martyrs might have stood,
Yet full of sympathy with ev'ry mood,
In time of trouble cheery still and bright.
O precious, whom to love is but to see !
O queen of maidens ! it must surely be,
If aught that to perfection cometh near
Can e'er be found in this imperfect life,
You, perfect daughter, will but disappear
To shine as perfect mother, perfect wife.

G. WEATHERLY.



THE VIOLONCELLO'S NEXT ENGAGEMENT.



THE glories of the entertainment have faded, down goes gas, out scramble audience. It is the last night of the season; and the band, sorrowfully, gloomily every one, from the big drum down to the piccolo, are playing the National Anthem over said season's grave to give it decent burial. Even the first fiddle feels out of sorts. The bassoon has a tear-drop trembling on his left eye-lash, and lets it hang there, unsuspicious of the fact that all the while it glistens visibly in a tiny ray from the footlight. As for the violoncello next him, that cliff-browed, set-faced, hoary-headed old veteran of a score or two of pantomimes, surely this particular pantomime's death grieves him but little. Why should it—whilst he can twine his bony left arm around that old violoncello's neck as if it lived and loved him; when he can bend his grey head to its strings and hear the sweet pathos of their tones; when he can pass his long, skinny musician's fingers fondly over them to draw forth rich, soothing, swelling, falling, beautiful melody? Why should there be a quavering lip and a trembling eyelash when the last chord comes?

The chord is struck and over. Out of the orchestra and already on his way home is the first violin; the cornet has brought up the rear with a cadenza *morando;* the big drum has closed his last roll; the second violin has packed up his fiddle-case; bassoon and violoncello remain alone with the dying lights in the hall.

"Dick!" said the bassoon quietly.

Poor old white-faced violoncello never heeded. The left arm in its rusty sleeve still clasped the instrument's neck in that loving way; the old grey head bent down over the strings, with the eyes closed.

"Poor old chap!" observed the bassoon pityingly, as he turned up his coat-collar and tucked his instrument-case under his arm. "Blowed if he ain't a-playin' now!"

"Dick—Dick!" he repeated, tapping the old violoncello good-naturedly on the shoulder. The old man opened his eyes and awoke to the silence.

"Hallo, Tom Hornby! What—all gone? I thought"—he looked around him in disappointed inquiry, and spoke in a tone of sadness—"I thought he repeated that second strain. Well, well! How deaf I'm getting, to be sure!" The rusty black coat heaved with a sigh as its wearer rose and shut his music.

"All gone but you, Tom?" he said sorrowfully. "Well, I won't deny I thought they might ha' wished me 'Good night,' or 'Good-bye,' or something of the sort, for the last night; but I won't grumble. An old fellow who's as deaf as a post and has nobody to mind him ain't no place in an orchestra. He'd better get out of the road as quick as he can, and make no fuss about it. Friends ain't in his line."

"Now come, Dick, old man," expostulated the bassoon, "don't go for to speak like that. You knows there's one chap as is sorry for you—dash my hide if he ain't! Yes, says I, Dick; count me as your friend whenever you like. There's a bed for you and the same fare as I has myself whenever you like to claim 'em; and if we can't find you another 'sit' somewheres directly, it's a pity. Blow me, it's a pity!"

"Tom Hornby, you're a good-hearted fellow," returned the violoncello gratefully, as his stolid face relaxed a little before the bassoon's genial smile. "A useless, old, worn-out blessing like mine ain't much to give anybody," he continued, "but such as it is, Tom, take it for your kindness; and may you never have such a black world before you as I've got now."

They shook hands; the bassoon stepped through the little narrow door beneath the stage; and his companion, bearing his unwieldy violoncello, extinguished the last gas-jet as he followed him.

"Good night, Dick; and don't be down-hearted, old man. Your next engagement 'll make amends."

"Good night, Tom Hornby; God bless you."

Again they shook hands; then bassoon whistled off into the hurrying crowd at the stage-door, and violoncello turned to face the wind the other way. Out into the bleak street, where tiny yellow rushlights of lamps cast a melancholy glimmer or two upon crowds of hurrying faces, some fat and round, some red and well-favoured, some blue and ill-favoured: all hurrying along through the little snow-dots which the wind blew about. Old violoncello buttoned his rusty coat close, and turned up the collar as if the wind might find that an obstacle in its attacks upon his scraggy old throat, whilst he hugged that dingy big fiddle of his tight against his body, and settling his eyes straight before him, dragged his trembling knees in the direction they pointed. Up one street and down another; along a wide white road, lined with tall white mansions; down a narrow, wriggling, dark alley, lined with rickety lodging-houses. On he trudged through the grey pulpy mud of trampled snow.

On and on to that dreary blank of future which lay before him, the old lack-lustre eyes fixed in that straightforward look of despair, the cold loneliness

steadily settling down upon his aged heart to brood there. For the season was over, and old violoncello had struck his last chord at the hall.

"You see, Dobbs," the leader of the orchestra had said, "now the full season's over it's unreasonable to expect the management to keep up such a band, so, much as it goes against me to say it, we must part."

"Quite right," had chimed in the manager with the ferocious moustache. "Establishment expenses must be cut down, my man; everybody can't stop on; so there you are! Might as well ask me to keep extra bandsmen out of my own salary!"

So old violoncello struck his last chord and went with a leaden heart. Good-hearted Tom Hornby comforted him with hopes of that next engagement. But who would have him—poor, old, worn-out, deaf as he was? Nobody, he said. And his heart sank like a lump of cold lead as he thought of that answer.

The pulpy slush changed to white untrodden snow upon the path; the streets were quieter and darker. Old violoncello reached his humble lodging, admitted himself by his latch-key, climbed the three flights of rickety stairs. In the tiny garret at the top of them was a fireless grate, a square white bed, a table, a chair, and a window—one broken pane of which was stopped with brown paper. As he lighted his two inches of lean candle and showed these, the old man sat down upon the chair and bent his grey head upon the table. No tear was in his eyes when he lifted them. He drew his violoncello closer to him; he hugged it as he might a favourite child; then he bent his head once more upon the little table, and his bow slipped to the floor from the numbed fingers which clasped it.

Lower and lower burned the candle, whilst outside, upon the bars of the window-panes, white snow gathered higher and higher as the flakes kept falling.

When the blanched face was again upturned the eyes were moistened.

"So we've come to it at last, have we, old fiddle?" the old man moaned in apostrophe of his loved violoncello, as he stooped to pick up the bow. "We're old now, both of us; we're no use now! You're patched and cracked, and your master's deaf—they don't want a pair like us nowadays. We're ready almost for our last engagement. Yes, old fiddle; you've been a good servant to your old master, and you could do something, too, in your day; but not much longer—not very much longer. We're old now; they can do without us."

A tear dropped upon the finger-board, and the old man wiped it carefully off with his coat-sleeve.



"POOR OLD CHAP! BLOWED IF HE AIN'T A-PLAYIN' NOW!" (*p.* 307).



"OLD VIOLONCELLO HAD GONE TO HIS LAST ENGAGEMENT."

"Yes, old friend," he continued, gazing affectionately on his battered companion of wood and strings, "we've been friends for long, but we're coming to our last engagement."

Whilst the snow-flakes fell thicker and thicker against the window, softly and noiselessly, the old man drew his bow across the strings of the violoncello in a half-unconscious way, bending down his head to the instrument just as he always did. Though his ears were deaf to aught else, they never failed to drink in the tones which sprang from those vibrating cords. Slowly, weirdly, pathetically, the music rose and fell in gentle ripples around the room, so hushed and low that it awakened no echoes in the silent house. Only in that poor chamber would it wander; only around that poor old couple, instrument and player, would its sweet melody float. As he played the old man's eyes gently closed, and from his face the lines of settled despair gradually cleared away, till only a happy smile was left beaming around wrinkles. The player's thoughts were far away; to him the cold room and the snowy window were become as nought. Back in the little garden of fifty years ago, in the arbour scented by the pinks and roses, with the dark velvet pansies clustering the little plot at his feet, he was listening again to that same old tune as he heard it first, when the wife, long dead, sang the words, and he played the air upon that well-remembered violin. He could hear her voice; he could smell the roses' perfume. Surely it was that same violin he was playing now! From his closed eyes, down the white cheeks, tears dropped warm and fast upon the strings of the violoncello. He heeded them not; his thoughts were far away.

So the tune rose and fell, and the snow gathered thicker and thicker on the window-panes, till the candle on the little table flickered out. Yet the arm in the rusty sleeve did not weary in its slow regular motion: the cold fingers still pressed the strings; the player did not awake to the darkness of the room.

"We're old now," he murmured; "they don't want us any longer."

His eyes were still shut; but the tune waxed slower and slower and slower, till it died altogether. The bow slipped from the old man's fingers; the grey head sank upon the table; the violoncello rested soundless against the breast of the rusty black coat.

* * * * * *

When the morning came and bright sun-rays struggled through the snow-blocked window-panes, they shone upon a tiny table, a square white bed, a fireless grate, a patched and dingy old violoncello. But the bow had fallen upon the floor, and the player's nerveless fingers hung white and stiffened upon the strings.

Old Violoncello had gone to his last engagement.

W. H. S.

HOW THE CENSUS IS TAKEN.

BY A FORMER "ENUMERATOR."



HEN Parliament has decreed that a census of the people shall be taken, and provided for the costs of the operation; when the Registrar-General has revised his previous arrangements, and when the vast mass of schedules have left the printers, the work of enumeration becomes that of the parochial enumerators. Whether it be a rural parish or a great town, the registrars map it out into districts, allotting to each an "enumerator," to whom is entrusted the task of leaving the schedules at the homes of the people and of collecting them, after satisfying himself that they are duly filled in, or remedying any omission. The enumerator, then, is the active agent in the taking of the census—he procures that vast mass of statistical information which is afterwards collated, arranged, digested, and tabulated by the central officials. The task is one of some difficulty, requiring a knowledge of the neighbourhood to be visited, persuasive powers, and the exercise of patient perseverance. The registrars who appoint these enumerators are requested to endeavour to secure the services of men interested in the work—of ministers, literary men, and others, who know the people, and who will secure as far as possible correct enumeration. The duties of the enumerator are not light, the remuneration is not heavy, so there is some inducement to regard it as a "service to the commonwealth," and as a labour of love.

The enumerator is furnished with the proper number of "schedules"—the sheets of printed paper on which are to be written the names, ages, and other particulars of the residents in the houses where they are to be left; a book in which each schedule left is to be entered; a paper of directions; and the loan of a satchel, if he pleases, for the reception of these official documents. The number of houses allotted to him to visit varies according to the density or otherwise of the population, between 200 and 300 being the average in towns, less in rural districts. Each enumerator is furnished with a list of the streets or the parts he has to leave schedules in, and this must be effected at the times named for delivery and gathering in. With this guide to the work, it is left in his hands; and from the results of the past, it may be fairly said that the confidence has been fully justified, and that the completeness of the census is often due to the enumerator's perseverance. It is no easy task to visit over 200 houses, and to induce the average Briton to fill in the papers properly. The enumerator is met at the commencement with the supposition that he is a bill-distributor, that he is the representative of "the taxes," or that he is canvassing for industrial life assurance companies. He has to clear away these fallacies, less prevalent since reading became more easy, and newspapers with anticipatory census-articles more abundant. He has next to explain, in the bulk of instances, how the paper is to be filled up, and to decide debatable points—whether Tom who is at sea, or Mary who is at service, but who comes on Sunday nights, is to be included; and whether Bessie, who is "nine next week," shall be put down as eight or nine. All these points are decided by the headings and instructions, and by the "specimens" of census papers filled up; but many are "not good readers," and a large proportion prefer oral explanation.

But the difficulties of the enumerator culminate on the day for the ingathering of the schedules. He has duly delivered his quota, and been favoured in meeting with that general civility which is the rule; he has entered each number, and the number of the house, or its situation, in the enumerator's book, and has laid away his surplus schedules for return. It is now that he finds that in Artemus Ward's comic sketch there is the true maxim that "taking the census requires experience, like any other business;" though the popular belief embedded in that sketch, that the difficulties are largely with the old maids who decline to disclose their ages, is rarely found in experience. The enumerator finds some schedules unfilled, because the heads of the family are "no scholars," or for similar reasons. His inquiries elicit redundant information, the memory of the mother supplying all the details with tolerable accuracy in a breath, helped out when lagging by domestic occurrences, such as the prevalence of measles, a relative's death, or the date of a wedding. It is easy to fill in the schedules—indeed it is difficult to induce the belief that extraneous facts must not be included.

But it is with the papers filled up in whole or in part that the enumerator has his task set. He glances at them to ascertain their accuracy, and he finds a few regardless of columns, many incomplete, some facetious, and some overflowing with unneeded particulars. Naturally, the class of district affects the proportion of the schedules filled in properly. In the aristocratic districts the returns need no revision, as a rule; where tradesmen live, there is usually a still more accurate return; but in the homes of the workmen, and where the "residuum" resides, there is needed the manipulation of the enumerator—the supply of facts omitted, and by pertinent questions elicited, and in the task both tact and suavity are needed. The columns for names are usually correct; but in that for the age it is not uncommon to find "306" for 36; and there is a restless desire on the part of some mothers to give the exact age of infants in months. The geography of the column of place of birth needs a little attention, hazy notions being entertained as to the counties; and when the Irish population is met with, the stock of geographical knowledge of the enumerator often runs out. In the other particulars demanded, there is less difficulty met with in practice; but it is not uncommon to find the

"relationship" column oddly filled up; and the "occupation" is very often given in technical phrases that need a little more light. In ship-building towns, the description "holder-up" will at times imply a riveter's labourer; in iron-making districts, "baller" is one of the workers at an iron-works; in mines, there are "spraggers," "trappers," "callers," and others, whose familiar designation needs a little elucidation. When he has brought the schedule into something like fulness of detail, the enumerator may pass on.

A copy of the form left with the householder is given below blank, whilst an example is also given showing the method of properly and fully filling in the schedule. It may be also added that the registrar of the district receives the schedules from the enumerator, and after comparing them with the enumeration books, he sends the schedules to the Census Office, where they are arranged, tabulated, analysed, and the abstracts published at a later date. Local details of the numbers in towns or parishes may be had in April or May, but it will be much later before the numbers for the country will be procurable, and many months before the blue books containing the numbers in full detail are issued.

When the whole are gathered in, when those tenants that have moved out in the interval between collection and delivery are traced as far as possible, and when additional ones are given to and gathered from those who have moved in, the task of the enumerator is concluded after he has filled up the statement of the numbers of schedules delivered, gathered, spoiled, and unused, and the numbers of houses and shops, empty or occupied, and his vast mass of matter is delivered in to the head enumerator of the district. His task is one largely of dry detail, but it has given him an insight into the condition of the people such as is rarely obtained; and if his district is a "poor one," he will speedily forget the affront to his dignity in the supposition that had been hazarded that he was a "bailiff" or other minion of the law engaged in unpleasant intrusions into the homes of the people. The task of the census-taker has now become familiarised to the people, and gradually the importance of the task is becoming fully recognised by all; and with that recognition, and the aid of the press in urging the necessity for, and the usefulness of the information thus gained, that task will be made still easier as the decades pass, when generations grow up that know not the difficulties of the illiterate, nor the resorts of the ignorant to evade inquiries the use of which they do not comprehend.

List of Members of this Family, of Visitors, of Servants, and of all other Persons who Slept or Abode in this Dwelling on the Night of Sunday, April 3rd, 1881.

Name and Surname.	Relation to Head of Family.	Condition as to Marriage.	Sex.	Age Last Birth-day.	Rank, Profession, or Occupation.	Where Born.	If 1. Deaf or Dumb. 2. Blind. 3. Imbecile or Idiot 4. Lunatic.
No person absent on the night of Sunday, April 3rd, to be entered, except those travelling, or out at work during the night, and who return home on Monday, April 4th.	State whether Head, or Wife, Son, Daughter, or other Relative, Visitor, Boarder, &c., or Servant.	Write "Married," "Widower," "Widow," or "Unmarried," against names of all except young children.	Write "M" against Males, and "F" against Females.	For Infants under 1 Year, state the Age in Months.	Before filling up, read Instructions.*	Opposite Names of those born in England write County and Town or Parish. In Scotland, Ireland, or British Colonies, state Country or Colony.	Write the respective infirmities against Name of Afflicted Person, and if so from Birth, add "from Birth."
1.							
2.							
3.							
4.							
5.							
6.							
7.							
8.							
9.							
10.							

I declare the foregoing to be a true return, according to the best of my knowledge and belief.

Witness my Hand. (Signed) _____

Example of Mode of Filling up the Householder's Schedule.

Name and Surname.	Relation to Head of Family.	Condition as to Marriage.	Sex.	Age Last Birth-day.	Rank, Profession, or Occupation.*	Where Born.	If 1. Deaf or Dumb. 2. Blind. 3. Imbecile or Idiot 4. Lunatic.
1.—George Wood.	Head of Family.	Married.	M.	48	Farmer (of 317 acres, employing 8 labourers and 3 boys).	Surrey, Godstone.	———
2.—Maria Wood.	Wife.	Married.	F.	44	Farmer's Wife.	Scotland.	———
3.—Alan Wood.	Son.	Unmarried.	M.	20	Farmer's Son.	Surrey, Godstone.	———
4.—Flora Jane Wood.	Daughter.	———	F.	12	Scholar.	Kent, Ramsgate.	———
5.—Ellen Wood.	Mother.	Widow.	F.	71	Annuitant.	Canada.	Lunatic.
6.—Eliza Edwards.	Servant.	Unmarried.	F.	24	General Servant, Domestic.	Middlesex, Paddington.	———
7.—Ann Young.	Servant.	Unmarried.	F.	22	Dairymaid.	Surrey, Croydon.	———
8.—Thomas Jones.	Servant.	Unmarried.	M.	21	Farm Servant.	Essex, Epping.	———

* Elaborate directions for filling up this column occupy a large part of the Schedule.



WHAT TO WEAR.

CHIT-CHAT ON DRESS. BY OUR PARIS CORRESPONDENT.

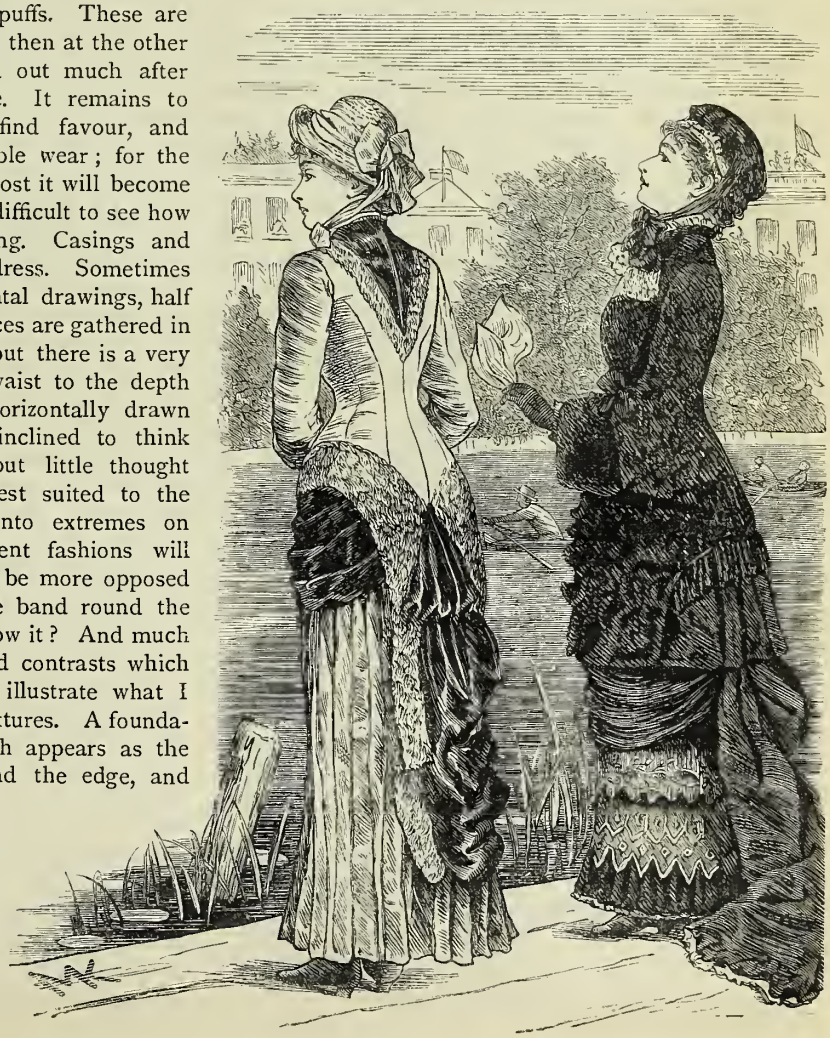
THERE is a most marked and decided change in the mode of making dresses, which further develops itself as the season progresses. Long skirts are by no means completely set aside. On the contrary, for all but walking dresses, in Paris, long and very training skirts are worn. These trains start from the side, and are supported by a balayeuse; not a mere muslin-lace-edged plaiting, but flounce upon flounce of box-plaited muslin, which would almost resist a bullet, so firm and compact is it. Such an arrangement must necessarily render the long dresses heavy, and it requires a graceful carriage, and much grace of movement on the part of the wearer, to make such skirts look really well.

A very large volume might be written on the wearing of clothes; the question of the day is not so much what to wear as how to wear it. Nothing can well look worse than a train which turns over and shows the lining, and yet any jerky movement produces this result. I will describe a few of the best Paris models, which may convey a correct idea of what is now being made both for home wear and export in the French capital. A long black satin dress with rounded train, bordered with three dentated flounces laid one over the other; the front of the skirt puffed full and close, with handsome side trimmings; the two sides quite dissimilar; the bodice coming only to the waist in front, and a long coat-basque at the back. An old-gold and dark myrtle-green silk, with a design of

leaves in embossed velvet upon it, the leaves outlined with a painted line of gold, was made in somewhat theatrical fashion. The flounces were all gathered, with many headings. The front was entirely old-gold; the back, green silk draped with skill. The trimming on the bodice was an appliqué of white lace, outlined with gold thread, and coloured silks, and from the neck sprang a large Medicis collar, supported on wires concealed beneath bands of gold braid. The collar was made of the appliqué of lace cut to the right form, and not plaited, and the sleeves showed the same lace again. The contrast in colours, and the whole make of this dress, was somewhat too theatrical; but Paris models should often be used, as the shops in England use them, for the foundation on which to design costumes suited to the requirements of the wearer.

In most of the dresses I have seen of late I note three or four important changes. The bodices are made with much fewer seams, and come to the waist only in front, or in a point just below the waist. Sometimes they have belts and buckles, but more often, in rich materials, a belt is made very deep of some four or six cross-cut folds of the material. Then there is a complete revolution in the matter of flounces, which have yielded to puffs. These are box-plaited or kilted at the top, and then at the other edge gathered, so that they stand out much after the fashion of a man's trunk-hose. It remains to be seen whether this style will find favour, and whether it will prove to be desirable wear; for the moment the bouffant appearance is lost it will become shabby and spoilt-looking, and it is difficult to see how crushing can be avoided in packing. Casings and gatherings appear on almost every dress. Sometimes the whole front is a mass of horizontal drawings, half an inch apart. Very often the bodices are gathered in a circular fashion round the neck; but there is a very general make in which, from the waist to the depth of half a yard, the skirts are horizontally drawn with closely-set runners. I am inclined to think that, in the desire for novelty, but little thought has been bestowed on what is best suited to the figure. Hitherto we have run into extremes on the side of slimness; these present fashions will produce no such result. What can be more opposed to slimness than a thick and wide band round the waist, and a series of gatherings below it? And much opposed to good taste are the vivid contrasts which now are fashionable. I can best illustrate what I mean by describing one of these mixtures. A foundation of dark blue royal satin, which appears as the skirt, with numerous flounces round the edge, and gathered and drawn half a yard from the waist; and again, as a round, deep collarette with circular drawings round the neck. On this dark but decided colour imagine a chintz foulard of a creamy-brown shade, scattered over with Pompadour bouquets; the bodice of the same gathered; a cross-cut folded belt, and dark blue collarette. The foundation of the short skirts are no wider, but they are so much more trimmed that they seem to be twice as full as they were last season, and many are bouffant at the waist.

Black will be much worn throughout the year, but it will be relieved by colour; and one of the many new features of present fashions is, that most of the black dresses have the trimmings lined with a coloured satin, which peeps out unexpectedly here and there, without much design. For example, a handsome black velvet and satin dress, made with a long coat fastened with steel buttons, had the upper portion of the skirt cut in tabs and lined with biscuit-colour. Another black satin had dentated flounces lined with pink; a fraise of satin, lined with pink, went down the front of the tunic; and the whole was trimmed with Spanish lace, which appears most popular. Another black dress displayed the colour more liberally. There was a wide gathered flounce, with many runnings by way of heading, round the skirt; the satin was red, in front formed a looped-up tunic, drawn back curtain-fashion, and bordered with deep lace; the back very bouffant; a full front of the red,



and everywhere the vivid red peeping in as though without design.

Chessboard checks are quite among the newest patterns in silk; black silk with a check pattern in satin, for example; or a corded check of brown and gold, and similar mixtures. A brown and old-gold silk of this design was made without any mixture of plain material, or of different pattern or stuff, and the tunic was quite original, and points to an entirely new style. Instead of the edge hanging down, as it has hitherto done, it was caught up underneath; the tunic consequently forming a puff instead of a drapery; it was gathered round the waist, and drawn up short in front.

Home dressmakers may be glad to know of a new invention in lieu of bone, viz., very thin steel made in the most useful lengths, and sold in bundles; each steel is covered with black ribbon, so that no casings are needed, and nothing has to be done but tack them on where required. I mention this because, though the bodices have less seams, they still have many bones. The bodices are made high to the throat, and are fussy and fully trimmed at the neck, but the sleeves remain still very close and narrow.

The new mantles of the year continue to be of the Dolman order; not quite so long as they were last season. They are made in satin, in brocade, in soleil, and in India cashmere; but in the two last materials there are some novelties. Cashmere has been made finer and closer, with a more satin-like surface, and soleil with a broader stripe. The Mother Hubbard cloaks continue to be worn, and are being made up in Spanish lace as well as in brocade and satin, black and brown; the latter having had a great run during the winter months. Most of the new mantles are fully trimmed with lace, especially Spanish, which has quite superseded French lace. It is goffered and plaited, and supplemented by bead galons and bead fringes, the newest trimmings being so arranged that the drops occur at long intervals, and the plaitings of lace have room to display themselves between the drops. The mantles of the season, like the dresses, come up very high to the throat, and many have the circular collarettes of lace. Large bows of ribbon tagged at the ends appear at the back of the waist. Black and gold (by gold I mean tinsel) mantles are much worn, and these are trimmed with bias folds of satin and gold braid, and heavy black fringe with gold drops. For young ladies a neat, dressy jacket is made in black and tweed, of an almond colour, close-fitting, with hip-pieces and a treble cape. The stockingnette jackets are not yet out of date, but hoods have had their day, and they are either not trimmed at all, or made with a row of inch-wide braid round, and rather a large collar. Opera cloaks are of the Dolman order. They are made in cream brocade silk or wool, and bordered with white fur. But, of course, any very rich material or broidered stuff is also suitable. Whether for morning or evening wear, they have two seams at the back, the short sleeves cut in one with the mantle. Among the newest shapes is the shawl-mantle, so called because the back is cut on the cross, and forms a point, the two cross-cut pieces being joined down the centre. The new ulsters have capes, which also form sleeves, but they are only used for travelling; Newmarket coats have superseded them. Even on ulsters the Algérienne mixtures find their way, and many of the biscuit-coloured tweeds have bows of striped satin ribbon of all shades.





Among the annexed illustrations will be found several styles of dress for the current month. Let us glance first at this single figure in outline descending the stairs, and wearing an evening demi-toilette. Her dress is a most useful but still fashionable black one, which can be made in either broché satin, or grenadine, and be trimmed with either jet or steel lace—if novelty be desired, the latter should have the preference. The sleeves are of Spanish lace, transparent from the top, and the pointed plastron both in front and at the back of the bodice is also of gathered lace; the rolled collar is supported invisibly with wires. Now let us turn to the large group of four figures.

The first figure, standing inside the room, wears a costume that may be made in cotton, in fine woollen, such as nun's veiling, or in satin, provided a strong contrast of colour is used. In the model, the puffed sleeves, the lining to the ruches and the skirt, are all light poreclain-blue; the remainder is the shade of brown known as "café au lait." The seated figure wears a painted dress; the bretelles, the demi-long sleeves, and the borderings to the double tunic are ornamented with painted tulips. This is essentially an evening dress.

The coat on the next figure is broché satin, and the skirt is trimmed with puffings of steel net—the new bouillonné arrangement described above. In delicate pink satin and white lace this proves a youthful and pretty-looking dress. The last young lady in the group wears a combination of cashmere and shot silk. The gathered plastron is silk outlined with lace, the panels are silk, so is the satchel that hangs at her side.

The second engraving shows two figures arranged for walking—one wearing a broché mantle lined with striped blue satin, for gay linings of plush and satin now form quite a feature in mantles. The black dress is embroidered with straw, and the bonnet is of fancy Tuscan straw lined with blue satin; the strings are shaded blue satin worked with straw.

On the other figure, the new shaded satin is displayed both as a scarf drapery in front, as a tunic at the back, and in the lining of the hood. This *ombré* or shaded satin is of one colour, and is shaded across the breadth from one selvedge to the other.

The remaining single figure in outline shows how the Bayadère satins are utilised for trimming; this brightly-striped fabric proves most effective on self-coloured Siciliennes and fine woollens. When flowers are worn either as bodice bouquets or in millinery, they are shaded, so are feathers; in fact the *ombré* effect is a feature in present modes.

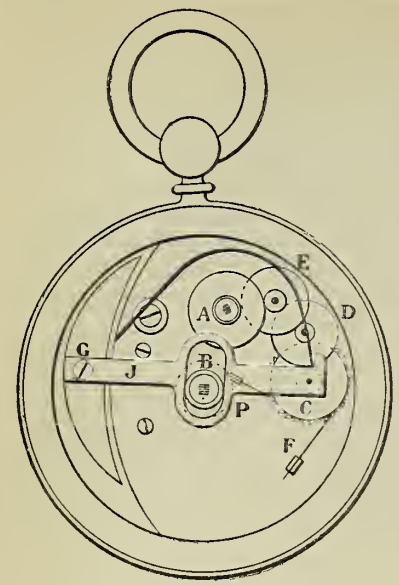
THE GATHERER.

Harmonic Telegraphy.

The system of sending several telegraphic messages along the same wire simultaneously, by means of several distinct musical notes, has lately been brought to practical success by Mr. E. Gray, of Chicago, an inventor whose name is associated with the history of the speaking telephone. Gray's harmonic telegraph is virtually an application of the musical telephone, whereby a musical note can be transmitted to a distant place electrically. In short, he causes no less than five musical notes of different pitch to be sent by wire simultaneously, and each of these notes is broken up into long and short sound signals by a telegraph clerk in the ordinary manner. Thus each distinct note conveys a distinct message, which is sent and received by separate clerks; but, such is the wonderful structure of matter, all the notes traverse the line-wire together at the same time without conflicting. Each note is sent by means of a vibrating tuning-fork connected up between the electric battery and the line in such a way as to interrupt the current flowing into the line. Every vibration of the fork causes an interruption of the current, and thus there are as many pulses of current sent into the line per second as there are vibrations of the fork per second. The intermittent current so produced is received at the distant end of the line by an electro-magnet which attracts the prongs of a similarly pitched fork, and sets it into corresponding vibration. In brief, the regularly interrupted current sent by the first fork starts the receiving fork into audible vibration, and the continuous hum it gives out is further broken up into long and short signals by the telegraph clerk at the sending end of the line. Each particular current can only set into vibration a receiving fork of the same pitch as that by which it was sent, and hence, though as many as five separate harmonic currents may be combined in the same wire, they can be made to deliver five separate tones, on five separate forks, because each fork will only respond to the elementary current set up in the line by its fellow-fork at the sending terminus. Mr. Gray's apparatus has been tried recently between New York and Boston with practical success, and the Western Union Telegraph Company of America have adopted it. No less than 2,100 messages of twenty words a-piece have been sent by it over a single wire in an hour, and as there are five operators required at each end of the line, this is at the rate of forty messages per man. Moreover, this number could be doubled by working on the "duplex" system.

A "Perpetual" Watch.

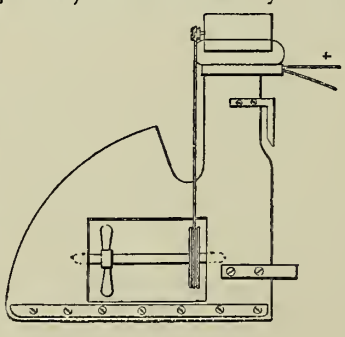
In this ingenious contrivance the principle of the ordinary pedometer is employed, and the stepping of the wearer is made to wind up the watch. It is the invention of Herr Loehr, of Vienna, and is designed to obviate the use of any sort of watch-key whatever. The engraving shows the mechanical device by which this is effected. A lever, J, weighted at one end, G, and pivoted at the other end, C, is kept by a long curved spring in the position shown, that is, between two banking pins, the lower of which it hits against at every step of the person in walking. A ratchet wheel with very fine teeth is pivoted at the same centre, C, as the weighted lever; and fixed to the lever is a pawl, P, which engages with the ratchet wheel and turns it round one tooth at every oscillation of the lever, that is, at every step. The movement of the ratchet wheel is communicated to the barrel arbor, A, of the watch-works by a train of wheels, D E. A second pawl, F, prevents the return of the ratchet wheel. To provide for the setting of the hands in case of error, there is a disc, B, which has a milled surface, slightly hollowed



out to suit the points of the fingers. As regards the action of the time-piece, it is said to keep a very good rate, owing to the small range of main-spring it requires. In this connection we may mention a proposal which has been made to establish in London a system of testing and certifying watches. Such a practice has been carried on by the Swiss Society of Arts at Geneva since the year 1872, and it might appropriately be undertaken by the City Clockmakers' Company. Any person, by taking his watch or time-piece to the Geneva society, can have its rate tested and certified for a payment of two francs if it does not come up to a certain standard of efficiency, and ten francs if it does. At present we can get our plate tested at the Goldsmiths' Hall, our thermometers and barometers tried at Kew, and the Admiralty chronometers are proved at Greenwich; but we have no authorised place for testing watches, and the loss is felt in the number of inaccurate watches which are sold and worn. Did a place of the kind exist, it would be to the interest of watchmakers to get their watches certified there, and to the advantage of their customers to buy a watch which had received that sanction.

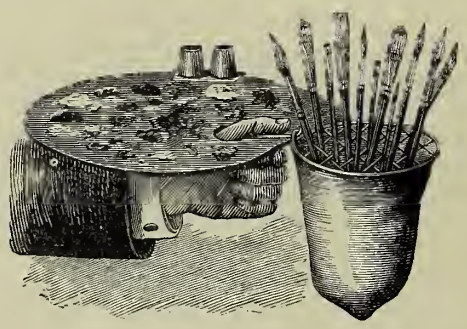
A New Electric Motor.

A little electric motor of great power, considering its size, has been devised by M. Trouvé, the well-known Paris mechanician. It is so constructed as to produce no "dead-points," or periodic slackening of the rotation of the driving wheel, which can readily attain a velocity of 200 revolutions in the second. It is, of course, driven by the current from a galvanic battery, and is designed chiefly for milliners and others who require a small but constant power to drive sewing machines, or for watchmakers and amateur mechanics for their lathes. It is capable of actuating an ordinary sewing machine with the current from a few cells of Bunsen's, or Daniell's cleaner and more wholesome battery. The figure shows the manner in which the inventor has applied it to the propulsion of a small boat. The motor is fixed on the stern of the boat, and connected by a flexible metallic belt to the shaft of the screw, which revolves in a cavity of the lower part of the rudder. The armature of the motor, being rotated by the action of the current from a small battery contained in the stern-locker, communicates its motion to the screw by means of the belt, and the boat is urged forwards or backwards, according as the screw revolves to the right hand or the left—that is, according to the direction given to the electric current by the person on board. For several months M. Trouvé has employed his motor to drive a boat 18 feet long while shooting wild-fowl on the Seine, and there being no noise of oars the game can be approached very closely. The highest speed attained was four and a half miles per hour.



An Artist's Brush-Holder.

We are not aware that any artist has ever complained of his being compelled to hold his brushes in his hand beside the palette while engaged in his professional work, but however that may be, a contrivance has been invented which is intended to relieve him from any such inconvenience as the practice alluded to may be considered to involve. The woodcut almost explains itself, but we may just say that the brush-holder consists of a bag, securely attached to the palette, across the mouth of which runs a wide-meshed net-work of stout wires. Instead of holding his brushes in his hand, as he generally does, and sometimes with difficulty, the artist would insert them handle downwards in separate meshes of the wire frame.



Lime-preserved Wood.

Lime has been found successful as a wood-preserver. The method, which is French, consists in piling the planks in a large tank, then covering them with quicklime and slaking them with water. The timber requires about a week to be thoroughly impregnated with the lime-water, before it is taken out of pickle and slowly dried. The entrance of the mineral particles into the grain also renders the wood harder and denser than before. Beech-wood, for example, becomes like oak, and without losing the elasticity that fits it for tool-handles, is far more durable than oak.

An Electrical Fire Tell-tale.

When it is reflected that the early moments of a fire's life are precisely those when it is most vulnerable, and that almost any fire could be extinguished by a bucket of water thrown on it were the outbreak discovered soon enough, the great importance of having some reliable apparatus for warning the inmates of a house, or the watchman on duty, when a fire originates on the premises, will be apparent to all. It is somewhat surprising that fire tell-tales are not more common than they are, but the reason of this probably lies in the fact that a fire is regarded by most people as a remote contingency. The automatic fire detector under notice has a good deal to recommend it. It will act whether the rise of temperature caused by the outbreak is sudden or slow, and it contains no parts likely to get out of order or require careful attention. As will be seen from Fig. 1, which represents the sensitive part, it consists of two long thin blades, A B, composed of two strips of different metals soldered together. The object in having them composite is that, when the temperature rises, the different expansion of the two metals may cause each bar to curve after the well-known manner of the metallic thermometer. These parallel blades are fixed at one end, where they are in metallic communication with a pair of binding screws, E F, to which are brought the wires of a voltaic battery. The blades are free at the other end, and in their normal state are in contact there by means of a small screw contact, G (see also Fig. 2) carried by the blade A. The pressure of this contact is regulated by two adjusting screws, C D, which bear upon the blades near their fixed ends. A metal cage, J J, surrounds the blades and protects them from mechanical injury, while at the same time it allows the heated air to play freely around them. The end of the cage where the contacts are is accessible by a lid, H, and the detector is fixed into position by the hook I, which fits into a socket placed in any convenient place in the apartment to be watched, say the wall or ceiling. The blades, being of the same construction, are equally liable to curvature under the influence of heat when they are both bare, but one of them, the blade A, is clothed in a sleeve of paper or other non-conducting fabric, so that it is less sensitive to a sudden rise of temperature than the naked blade B. The result is that, when the fire causes a sudden rise of temperature, the bare blade is curved away from the sheathed blade and contact is broken between them. Now, since the wires of the battery are connected to these blades by the terminals E E, the electric current circulates through them both, so long as there is contact between their ends; but as soon as this contact is broken, the current is interrupted. This interruption is made to announce the fire by means of an electro-magnet in the circuit. While the current is flowing through the blades and the electro-magnet, the armature of the latter is attracted to its poles; but when the current stops, the armature falls and in the act drops a disc which indicates the number of the room, and at the same time rings an alarm-bell. This part of the apparatus need not be described in detail, as it differs little from the ordinary devices for electric bells; but we have yet to consider the case in which the outbreak of fire causes a slow and gradual rise of temperature in the room. Then the two blades curve equally, for the sleeve of paper does not sensibly retard the penetration of the heat, and as a consequence the contact between them is maintained. But only for a time. As soon as a certain predetermined critical temperature is reached, the sheathed blade, A, is arrested by the point of a set-screw, K, Fig. 2; and since the naked blade, B, still continues to curve itself outward under the rising temperature, the contact is broken between them, the indicating disc falls as before, and the alarm-bell rings. Thus, whether the outbreak of fire be slow or sudden, it will be advertised by the detector.

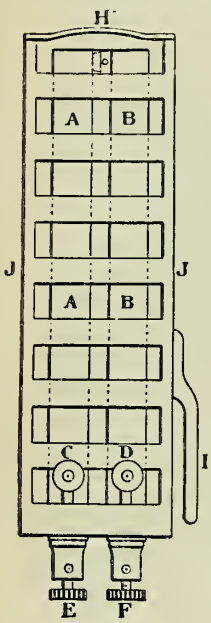


FIG. 1.

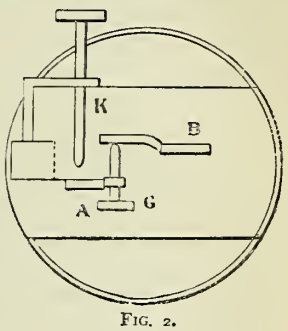
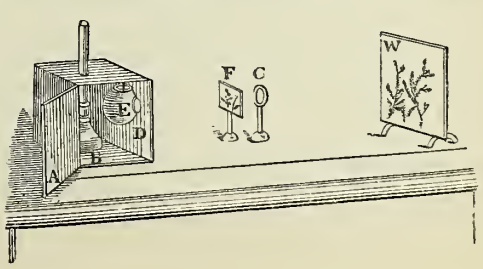


FIG. 2.

A Simple Magic Lantern.

The pictures of the magic lantern may be made so instructive and amusing, that a cheap and simple means of producing them will interest many. Such a makeshift apparatus is exhibited in the engraving, where A is an ordinary wooden packing-box; B, a kerosene hand-lamp having an argand burner; E is a common gold-fish globe of small dimensions; and C, a burning-glass or plano-convex lens. In one end of the box A, a hole D is cut large enough to admit a portion of the globe E, which should be hung within the box. The globe is to be filled with water from which the air has been expelled by boiling, and the lamp, B, is set close behind it. If now the surface of a piece of window glass is moistened with a strong solution of sulphate of soda, or even common table salt dissolved in water, and placed vertically on a little stand at F, so that the light of the lamp will be focussed on it by the globe of



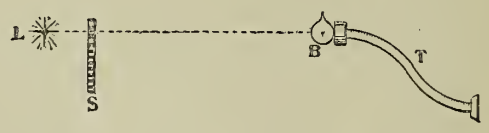
water, the image of the glass will be projected on a blank wall or the screen of white cloth, W, provided that the lens, C, is so placed in the path of the beam as to bring the image to a focus on the screen. In a few minutes the salt will begin to crystallise on the glass, and ferny plumes will seem to grow upon the screen as if by magic. By adding a few drops of aniline dye to the solution on the glass, the crystals will take the hue of gems.

Why Bees Prefer to Work in Darkness.

We all know the appearance of honey, and we know that after it has been strained it will crystallise and become practically sugar. An experiment has recently been made to ascertain the reason of this change, and this experiment has led up to the discovery why bees work in the dark. It had heretofore been suspected that the change in the appearance and consistency of honey was owing to "photographic action"—that is, to the same agency which affects the iodide of silver on the plate in photography. Mr. Scheiber's experiment confirms this view. This gentleman enclosed some honey in flasks well corked; some of the bottles he excluded from the light. The honey in the flasks exposed to light soon crystallised; that in the bottles in darkness underwent no change, and continued liquid. Now as the existence of young bees depends upon the liquidity of the food, the instinct of the bee is made manifest in excluding the light, and this is the reason why bees work in the dark—if they did not obscure their hive windows the food would be useless.

Musical Gases.

Dr. Tyndall has been making some singularly interesting experiments on gases and vapours, in order to verify his former researches upon their powers of absorbing radiant heat. One of the discoveries made by Professor Graham Bell while inventing his "photophone," for transmitting speech by means of light, was that if a rapidly interrupted beam from a powerful lamp or the sun himself was allowed to fall on a thin disc of any kind of material—glass, metal, india-rubber, wood, and so on—the disc would be heard to give out a musical tone. The disc shape was effective, but it was not essential, for such unlike things as a cigar and crystals of blue vitriol gave out a note peculiar to themselves. Even tobacco-smoke, bottled in a glass tube and held in the path of the occulted beam, was found to be in tune, and Professor Bell did not hesitate to infer that all bodies whatsoever were capable of uttering sound when influenced by light in this vibratory manner. Several physicists, however, took exception to this conclusion, and Dr. Tyndall was among the number. It seemed to him that the audible effect was due to the heat-rays in the beam expanding and contracting the substance on which they fell, and thus giving rise to vibrations in it, which could be heard by the ear. In other words, he believed the sound to be caused by the substance absorbing fresh heat each time a flash of light fell upon it; and all his subsequent experiments have tended to confirm this faith. Moreover he was quick to see that in Professor Bell's arrangement he had a novel plan for enabling him to test the absorptive power of different gases, by the intensity of the sounds they emit when held in the track of the intermittent beam, and thus to verify his former experiments, which have been seriously questioned by other investigators. In the beam of a Siemens electric lamp, L, rapidly



eclipsed by a rotating screen, S, nicked round the rim, he placed one after another numerous samples of different gases and vapours, each confined in a thin bulb of glass, B; and by listening at a short ear-trumpet, T, leading to the bulb, he could readily hear the tones, if any, which were delivered by the gas. The result was that all the bulbs containing those gases and vapours which his earlier experiments showed to be the best absorbers of radiant heat were found to ring out loud and clear, whereas the non-absorbent gases were either silent or yielded the feeblest tones. In this way he has proved that dry air is a very bad absorber of heat, whereas moist air, charged with water-vapour, is a very good one, a result which has an important climatic bearing. For it must follow that countries and districts which have a humid atmosphere will retain the solar heat far better than dry regions.

A Vegetable Hygrometer.

Prof. Bentley has recently directed attention to the interesting properties of the so-called Rose of Jericho. During the dry season it coils up into a kind of ball, and is blown about in the sandy deserts of Egypt and Syria for months. As soon, however, as the wet season sets in and the rain falls, its leaves open out and it begins life again. It expands in a like manner when placed in moist earth or sand or in water, and indeed is so sensitive to damp that the presence of moisture in the air may be at once detected by examining the changes in its leaves. Peculiar as this property is, its cause does not yet seem to have been definitely ascertained.

Beclouded Mirrors.

A cure for the dulling of mirrors by condensation of moisture on their clear reflecting surfaces is to be found in glycerine. This liquid has a strong attraction for water, and when it is lightly coated over the mirror it absorbs the vapours which tend to fall upon the latter, without diminishing the reflective power. The hint may prove useful to those living in damp and chilly houses, or to dentists who are troubled by the frequent clouding of their mouth-mirrors.

African Exploration.

The French are at present busily engaged in endeavouring to develop the productive tract of country which lies between the rivers Senegal and Niger, towards Timbuctoo. Their object is thus to establish a regular communication between their Senegambian provinces and the interior of Africa, whence great profits can be drawn. Their probable route is in an almost direct line to Timbuctoo. But the Governor of Sierra Leone does not relish the idea of our lively neighbours picking up all the crumbs of commerce, so he has determined to open up a rival route, by way of the Niger, to Timbuctoo. The assistance of a powerful king on the Upper Niger river has been gained, and an expedition will shortly set out. Mr. Joseph Thomson, the leader of the Geographical Society's East African expedition, has been named as the probable leader of the caravan. But at any rate the rivalry, friendly as it will be, cannot but be beneficial to both countries, and the explorations will no doubt add largely to our knowledge, of the interior of the vast African continent, of its immense resources and of its valuable products hitherto kept almost entirely out of our reach. We trust that no effort will be spared to gain the good-will of the native potentates through whose territories our caravans will have to pass to Timbuctoo.



MAP SHOWING PROBABLE ROUTES TO TIMBUCTOO FROM SENEGAL AND SIERRA LEONE RESPECTIVELY.

Patterns on Pearl Buttons.

A simple method of producing artistic patterns on pearl buttons has just been introduced. The invention consists in first painting or sizing on the surface of the button, with a substance that will not dissolve in a nitrate of silver solution, the design that is to be worked out. A solution of nitrate of silver has next to be applied with a brush to the entire surface of the button, and the button is then to be exposed to the light. The nitrate of silver will soon be changed by the actinic effect of the light into a light brown or darker colour, according to the strength of the solution and the length of the exposure. The size or paint being now washed off with spirits of turpentine, the pattern will be left clear in the natural colour of the button, and it may then be further elaborated by gilding or engraving.

Kindling Fires with Gas.

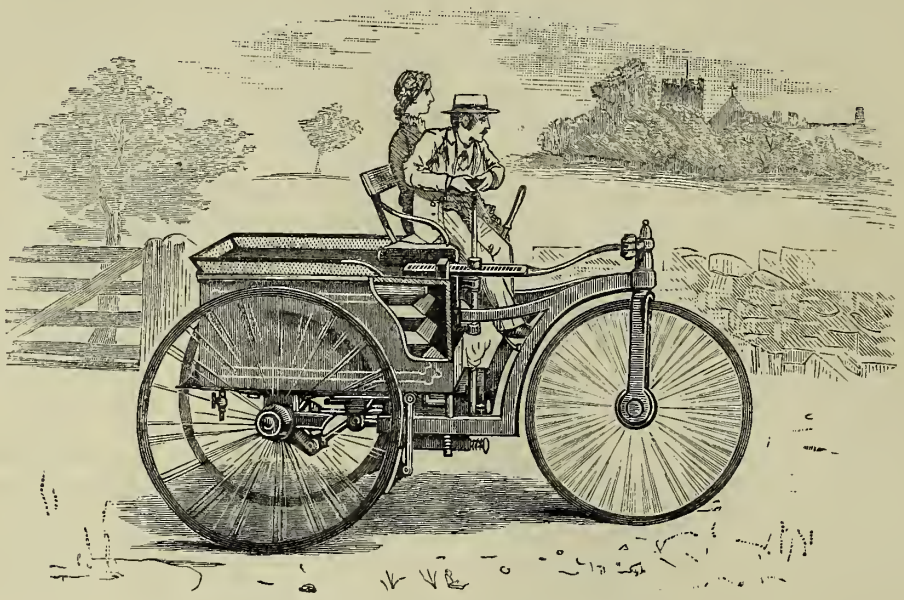
The practice of kindling the fires of locomotives with gas instead of wood is growing in Germany, and is said to prove economical. The plan followed is that of Herr Siegert, and consists in placing an iron plate into the grate from below, and building coal and anthracite above it in small lumps. The plate is then withdrawn and, without disturbing the fabric of coal, a horizontal tube having a row of gas-burners is substituted. The gas is brought to this tube by a pipe of india-rubber from a small gas-holder, and the burner is so designed that the gas can mix with air so as to yield a very hot flame, like that of a Bunsen burner. In about twenty minutes after lighting the jets, the anthracite which forms the foundation of the fire ignites, and after about twenty minutes more the burning coal may be spread out so as to make the combustion general. In connection with this improvement, we may allude to the new process for making gas from mineral oil which has been introduced into important engineering works at Glasgow. It is the invention of Colonel A. P. Chamberlain, and consists in feeding a supply of mineral oil, water, and air into three retorts, where decomposition takes place. The gas is purified, then stored in the gas-holder, and while giving a whiter, purer light than coal-gas, is not so injurious to gilding and pictures. It is particularly suitable for churches, schools, and mansions, and can be made at less cost than coal-gas.

Cement for Aquariums.

A cement which is highly efficacious for stopping leaks in water-tanks, or aquariums, and which is in successful use at the London Zoological Gardens, is made by taking litharge, fine white dry sand, and plaster of Paris, of each one gill; finely powdered resin, one-third gill. These ingredients are to be thoroughly mixed, and made into a paste, with boiled linseed oil to which some driers has been added. The paste is then to be beaten well, and allowed to stand for four or five hours before using it. Glass cemented into its frame with this cement will hold either salt or fresh water.

A Carriage Driven by Gas.

Several appliances have now been put before the public for driving vehicles by other than animal power. Most, if not all of these, have proposed to utilise steam in various ways, but the carriage represented in our woodcut is driven by common gas,



mixed with a certain proportion of air and exploded in the cylinder in the manner common to gas-engines. This engine is attached to the framework of the carriage, supported behind by the axle and in front by a castor-wheel, the frame of which is furnished with a lever moved by a rack and pinion, the shaft of the latter carrying a hand-wheel for use in guiding the vehicle. The box on which the passengers sit contains a weighted bellows full of gas, which finds entrance into the cylinder by a valve at its forward end. The piston may be connected directly with a crank formed in the axle. The engine can be started or stopped at once, or its speed may be varied by varying the amount of gas admitted into the cylinder. As the working of the machine is very simple, the services of an engineer or other skilled attendant are not required.

An Electric Probe.

M. Trouvé, of Paris, has made several useful applications of electricity to surgical instruments, notably his polyscope, for illuminating the more inaccessible cavities of the body by means of a tiny electric light enclosed in a glass bulb. His electric probe is also worthy of notice, and may prove serviceable in military surgery. It consists of two metal stems ending in two sharp polished points, placed very close together, yet separated by a thin layer of an insulating material. These rods are connected in circuit with a small battery and an electric "trembler" bell. When the double-pointed probe comes into contact with a bullet or other metallic splinter in a wound, the circuit of the battery is closed and the bell is rung. Flesh or bone has too much electric resistance to complete the circuit and cause the bell to ring, but any sort of metal will do so. If the metal is lead, and part (say) of a bullet, the keen points of the probe enter it and the ringing of the bell is continuous; but if it is iron or any such hard metal, the contact is usually uncertain and the bell rings in a jerky fashion. In this way, after some experience, the surgeon can ascertain the position and nature of the intruding mass.

PRIZE AWARD.

The Editor has much pleasure in announcing that the Prize of Five Pounds offered in April last by the Proprietors of this Magazine, for the best specimen of Fancy Needlework, &c., has been awarded to MISS MARTHA BISHOP, *Drayton, Berks, for her originally-designed and worked banner-screen, in crewel-work on black cloth.*

The following receive honourable mention:—MISS ALICE SLANEY, *Newcastle, Staffordshire;* MISS EMMA KENNICOTT, *Tavistock, South Devon;* MISS MAUDE PILCHER, *Canterbury;* MISS JESSIE FIFE TRACY, *Ipswich (for the figure).*

Our readers are reminded that the Solutions of Prize Acrostics, for the best set of which a Prize of Two Guineas is offered, should be in the Editor's hands by March 31st at latest.

FURTHER PRIZE ANNOUNCEMENTS.

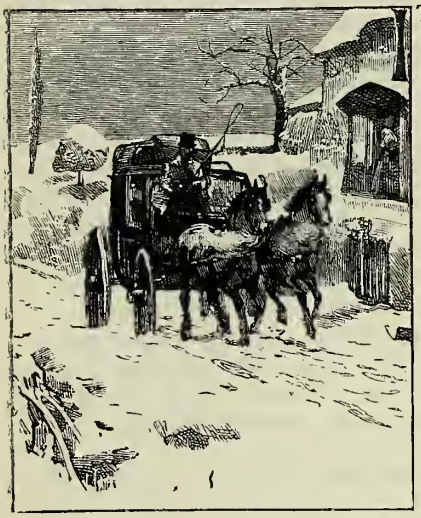
A NEW SCHEME OF PRIZE COMPETITIONS *in connection with this Magazine will be duly announced in our next issue (being the Part for May,* 1881).

THE PROBATION OF DOROTHY TRAVERS.

By the Author of "In a Minor Key."

CHAPTER THE EIGHTEENTH.

STORMY WEATHER.



IT is Christmas weather indeed. Snow on the ground and in the air, ice inches thick on the water and in the roads, air keen and cutting as a knife, crystal icicles and starving robins, these are the order of the day. Brisk, exhilarating weather to the strong, but bringing in its train sickness, often death, to the old, the young, and the weak.

Joan, who certainly belongs to the former category, is driving home along snow-covered roads, through snow-laden hedges, all the old familiar landmarks buried in one uniform white shroud, cold, chill, and dreary as she herself feels on this her lonely home-coming. Yet it is not absolutely cheerless. Spite of the piercing cold, the door of more than one cottage opens, and looking out with eager eyes, she catches glimpses of warm firelight, of the familiar curtsey, the smile of greeting, which tell her, what she had begun to doubt, that she has done right and wisely in coming home, though she has been forced to come alone.

For Anne and the baron are gone to spend Christmas in Hungary instead of coming to England—the invitation to the baron's cousin, Prince Czady, whose magnificence and hospitality are notorious, and the prospect of some weeks of gaiety in Vienna, having altogether stifled the home-sickness Anne was apt to profess when bored by the good people of Berlin. It was with many expressions of regret, with many assurances of her affection, but with no deviation from her purpose, that she suffered Joan to depart for England, to re-enter her old home solitary and sad.

It is a fairly long drive she has before her. In old days she used to think nothing of it, barely half an hour's business she would call the four miles; but this afternoon, when old memories will crowd upon her, when her heart is full, and she is weary and chilled, how interminably long it seems, and how the station fly creeps and crawls!

Here she is at last. There is the church, further on she sees the Vicarage and schools, there is the village green, with its two great beeches, there the turn to the Manor, and here, ah! here is home. The Lodge gates are thrown wide open, and she puts down the window, for it is her old nurse herself who has forsaken her fireside, and is holding open the gate that is to admit her darling, Miss Joan.

It is the latter's old voice and manner that speaks.

"Go in at once, Martha, this very moment. The idea of your coming out without your shawl in this weather!" and Joan springs out of the vehicle, which she orders to drive up to the house with the maid, takes the old woman round the waist, and whirls her back to her warm corner by the fire.

"There, you dear old thing! Now I will speak to you;" and suiting the action to the word, she kisses her old nurse with as much affection as she did when a child.

"I couldn't let Polly open the gate to you, Miss Joan."

"No, of course you could not; but you might have put on something warm, might not you?" and Joan pokes the fire and shivers.

"But you are just frozen, my dear, and this is but a poor bit of fire for ye. You had better go home and get yourself warm, or maybe you will catch cold. There is some one waiting for ye up there too," and the old woman points in the direction of the house.

"Some one waiting for me?" asks Joan slowly and dreamily. "No, Martha, there is no one waiting for me but Mrs. Groves and my dear old Bruin. I am all alone now."

And yet she rises from the low footstool on which she has seated herself, and, whilst her heart gives a great bound, looks out of the narrow casement window.

"Well, just you see, my dear. There is some one there very glad to have you home, I can tell you, so just you go home and get warm, that is my dear."

Joan acquiesces silently, allows old Martha, whilst asking after Anne and fondly mentioning her dear old mistress, to pull her sealskin closer round her throat and retie her black lace, as she has done for her so many a time in nursery days, and with a last fond bright look steps out into the snow, and commences her rapid walk up the drive.

"Some one waiting for her. Who can it be? Why was old Martha so mysterious? Can it be—— No, it is not likely, not possible. And yet, is there any one else she knows one-half so sympathetic, any one else who would guess what this home-coming was to her? Certainly not Sir Augustus, and almost as certainly not Louisa. And yet the latter is kind-hearted when it does not interfere with her plans to be so. And if not Sir Augustus or Lady Travers, who then but——?"

And here she reaches the front door, which is open

wide to receive her, whilst Mrs. Groves stands with a beaming countenance just within. Joan greets her in her own warm manner, whilst her eye roves round the interior of the hall, yet sees nothing but a blazing fire and her own boxes. As she advances into the house, the drawing-room door opens, and a slim girlish figure comes out to meet her.

"Dear, dear Joan, I am so glad to see you again!"

Joan gives a tiny inaudible gasp of disappointment.

"Dolly, is it you?" she cries cheerily. "No, impossible! Why, you *are* grown, child."

"Not out of recognition, Joan, I hope," responds Dolly, drawing her cousin into the drawing-room, where tea is prepared and a blazing fire burns on the hearth.

"Almost out of recognition, though, Dolly. I might have passed you, and not have known you. You are grown a woman, and you were such a dear bright child."

"One cannot always be a child," and Dolly gives the ghost of a sigh. "I am nineteen now, and am become quite sober-minded;" and as a contradiction to her words she bursts into a short hearty laugh, struck by the ludicrousness of her own words.

Joan laughs too.

"You look it, though," she answers. "Oh, how delicious! There is no tea like what you get in England. In Germany I always drank coffee, which I detest."

"And how are Anne and the baron?" asks Dolly. "Did you leave them all quite well? It is very shabby of them not to come to England for Christmas. I wonder Anne does not pine for home."

So they drift into a long comfortable talk in the warm cosy room, sweet with the smell of pot-pourri, passing from subject to subject with such rapidity that they have to return to them again and again in order to clear them up, and a good hour elapses before they pause, and Dolly, looking at the clock, says she must go home.

Joan takes the opportunity to look round the room. How pretty, how English it looks! In this frost and snow there are flowers in the jardinières and in a good many of the vases, the cretonnes look fresh and bright, lightened up by pretty pieces of art needlework scattered about the room. Her mother's sofa is wheeled to a new place. Some one has been at work here, and has prepared it for her reception. Who is it? she wonders vaguely.

"Mamma wants you to come and dine with us this evening, Joan," says Dolly, breaking in on her conjectures. "You will, won't you? The brougham shall be sent for you and take you home; but do just as you like, for I know how tired you must be."

"Yes, Dolly, I will come, for I should like it; only," glancing out of the window, "you must wait to go with me, for it is snowing hard."

In truth the snow is coming down in great flakes thick and fast, the air is quite dark with it, but Dolly laughs.

"I don't mind the snow one bit," she says, "and I must go home."

"But why?"

"To Ferdie. I always sit with him at this time, and he would be so disappointed if I were not to appear."

"Oh, Dolly! how heartless you must think me! I have never inquired after Ferdie."

"You will see him to-night. He is very anxious to hear all that you have been doing, he says. Don't ask me about him, Joan, my darling. But you understand, don't you? I must not disappoint him, so good-bye."

Joan holds Dolly's little hand in her own large one. "Is it that which makes you look thin, Dolly? Why, child, your face is half the size it used to be, grown quite long, but you are more like our great-grandmother than ever. No, I am not going to send you out into the snow without a cloak, so submit you must. Who is that passed the window? Why, no! yes, it is Mr. Ingram."

Yes, Geoffrey it is who stands at the front door as Joan goes out into the hall to open it to him, and bids him welcome, coat, face, and hair one mass of snow, "a pretty object for a visitor," as he says, with a smile, in response to the invitation into the drawing-room.

"The fact is," he continues, "I have brought Miss Travers' ulster for her, and a very large umbrella, as I knew she had been imprudent enough to go out without a wrap, and with a very elegant London article, absolutely useless to-day;" and he unfolds Dolly's waterproof and displays an umbrella of formidable dimensions.

"How good of you!" says Dolly, coming forward. "This dear Joan was bent on wrapping me up in a cloak three times too large for me before she would allow me to go;" and Dolly slips into her ulster, whilst Geoffrey, declining tea, stands apart with Joan, and asks her about her journey, the Stieglitzes, and other such-like topics, till her cousin is fully equipped, and then, saying he cannot consent to deluge the hall any longer by thawing in it, bids Joan a warm good-bye, and goes off, holding the umbrella carefully over Dolly.

Joan watches them from the window, and a pang goes through her.

"Was it a pretext to see me, or was it solicitude for her?" she asks herself twenty times, as she sits in unwonted idleness by the fire, conjuring up the image of those two under the umbrella together: Dolly's fair delicate face standing out so prettily from the high collar drawn closely round her throat; Geoffrey, tall and strong, bending slightly over her as he shelters her from the driving snow, giving them a confidential appearance, which to her speaks volumes of their intercourse during this fortnight that they have been constantly together.

Meanwhile Dolly tramps bravely through the fresh-fallen snow, with Geoffrey at her side, but they have some way to walk, and it is slow work against the blinding snow above and the slippery ground below. They do not talk much, for they have enough to do to pick their way and make head against the boisterous

wind, yet both would willingly have prolonged their walk indefinitely. To them the sky is blue, the air balmy, they heed not the snow and the ice, but only one of them is conscious of his sensations. Geoffrey is perfectly aware of his feelings, but not so Dolly. She fancies that her sole wish is to return to Ferdie, but until she is with him it is very kind of Mr. Ingram to hold the umbrella over her, and very pleasant to have him for a companion.

They meet no one, for the weather is not tempting for man or beast. As they come within sight of the large pond, where they were skating this morning, it is quite deserted; and Dolly, remembering how she left them all there this afternoon, wonders who recollected her at the Lodge, and gave Geoffrey her ulster to bring.

"Who gave you my ulster?" she asks suddenly.

"Ferdie procured it for me somehow," he answers; and Dolly looks up at him.

"Then no one asked you to come for me?" she says, and relapses into silence.

"No, no one, for they are occupied by the Christmas people, who arrived by the same train as Miss Joan, to say nothing of a most momentous occurrence, which is enough to distract them all. Lord Marsland has appeared suddenly on the scene, having arrived in a sleigh from Gorham, where he is staying."

"Lord Marsland," cries Dolly, with the same shadow of a smile on her face as there is on Geoffrey's. "I am very glad; I want so much to see him."

But Geoffrey looks grave.

"Wait to be glad," he says, "till you have seen him."

"You do not like him?"

"Personally, I know very little of him, but I have heard a great deal of him, and that not in his favour. But I will not prejudice you any further. You will soon see him, and be able to form an opinion for yourself;" and as they have just reached the hall-door, Dolly asks no more, but with a new sensation of depression enters the house.

The sound of laughing and talking in the library penetrates even to the outer hall as she unrobes, and once more thanks Mr. Ingram for his timely appearance at the Lodge, but her eyes fall before his, although the words he says are commonplace enough.

"I do not think I could have let *you* walk home alone in this weather."

With a feeling of escaping from something, she knows not what, she abruptly leaves him, and flies up-stairs, never drawing breath till she reaches the door of Ferdie's room. Mr. Ingram gazes after her wonderingly for one minute, and then repairs to his room. Five minutes afterwards he is in the library, greeting such new arrivals as he knows, and revelling in a warm room and hot tea.

No one asks him what he has been doing out in the snow, for no one has missed him. Rose sits making the tea, and by her side a tall, fair, weak-looking man, who may be twenty or may be fifty, with wrinkles in his forehead, and yet but a sprouting moustache, to whom life seems to be but just beginning, and yet has lost its savour—in one word, Lord Marsland. Rose, with her vivid dark beauty, makes a good contrast to him, thinks Geoffrey, as he walks up to the table and asks for a cup of tea, and she languidly looks up, and inquires where he has been hiding himself, but does not listen for his answer. Lord Marsland too glances at him.

"Why, Ingram, you here?" he asks, not as though he were over well pleased at the meeting, and then faces round more decidedly to Rose, and continues his conversation with her. Geoffrey retires to talk to Mrs. Cartwright, Lady Travers' sister, yet not so far from the tea-table but that he can see all Rose's airs and graces, hear Lady Travers' gracious speeches to the young man, and wonder how much is play and how much earnest. Up-stairs, the boys are making a racket, from time to time invading the room where Dolly and Lou sit with Ferdie, trying hard to inveigle the two girls to join them in some wonderful preparation for the morrow. They are nice boys on the whole, particularly Jack, the eldest, who is at the uncomfortable age of sixteen, and, in consequence, shuns the drawing-room, and is yet too old for the school-room. Ferdie likes to see them and to hear them talk, but a very little tires him, and Dolly has constantly to admonish them to quietness, for the child has had visitors all the afternoon, and is almost overdone. Mrs. Cartwright steals up quietly afterwards to sit with him, and Dolly can see how shocked she is at the change in her nephew.

He lies there quite passive, with his eyes fixed on the door, neither speaking nor moving, listening to the quiet talk around him, holding one of Dolly's hands tight in his little thin fingers, till he hears a man's footstep on the stairs.

"Here is Geoffrey," he says, with a smile of contentment; and Mrs. Cartwright, rising to go, calls Lou to come with her, as she has a present to show her. Dolly seems inclined to follow their example. She even murmurs something about to-morrow as a pretext, but Ferdie only clasps her hand the tighter, and before she can withdraw it Geoffrey is by her side.

"I am late to-night, Ferdie, am I not?" he asks; and the firm quiet voice sets at rest the agitation Dolly has felt at the sound of his footfall, and she subsides once more into her chair.

"Are you quite warm and rested?" he continues, turning to her; "and quite sure you have not caught cold?"

"Oh, no, I am none the worse."

"You heard of our snowy walk, Ferdie, did you not? and how bravely Miss Dolly faced the elements?"

"What nonsense!" puts in Dolly.

"Yes, she is brave," affirms Ferdie; "I have always said so. Do you know, Geoffrey, what she did this summer? Yes, Dolly, I shall tell, so you need not frown at me. Well, it was very hot weather, and I was wearing very thin suits. Jack and all the boys were at home, and one day when they were making some grand experiments with chemicals, there was an explosion, and somehow my blouse caught fire. You

do not know how it blazed up ; oh, it was dreadful!" and the child shudders at the bare recollection of it. "Lou stood still and screamed, and Jack and Bob had run out of the room for some water when Dolly came in. *She* did not scream or say a word, but, in her thin dress, she threw herself on me—not hurting me, you know—and just smothered the fire all out. She burnt her hand, but I was only scorched. Don't you call that brave?" And Ferdie holds up Dolly's hand, palm outwards, on which stands out a long wide scar.

"Indeed I do," responds Geoffrey. "She was more than brave : she was wise ; but had I not heard this story, I should never have doubted your sister's bravery ;" and once more he turns that look on Dolly that had so troubled her earlier in the day.

She laughs nervously now.

"Ferdie is a great hand at making mountains out of mole-hills, Mr. Ingram," she says, "as perhaps you know, and sometimes I find my most ordinary actions magnified so extraordinarily that I hardly recognise them. You don't spare my blushes, do you, darling?" and she turns her eyes away from Geoffrey to her boy.

"Every word I told you, Geoffrey, was true, and I say it again ; Dolly is very brave."

"I hope I am," she answers *sotto voce*, feeling somehow that something more than mere courage will soon be tried ; "but I do not feel so." And by a quick transition she turns the conversation to Christmas cards and Christmas trees, and quietly slips away as Lady Travers enters the room ; not, however, before Geoffrey has time to say to Ferdie—

"Miss Dolly is not very well this evening, is she?"

"Oh, yes, I think so. Perhaps she is tired, for she sat up with me a great part of last night, as I was very restless, and nurse sleepy, and she has been busy all day."

Alone in her room, Dolly sinks down on a chair and tries to think. What is she to think about? To-day —yesterday—the day before—last week? What image do they bring before her? Ferdie—always Ferdie, and with him, interwoven with their talks, with her contrivances for his amusement, with all her ideas, her interests, she sees the tall upright figure, the kind sagacious eyes, the quiet resolute smile of Geoffrey Ingram. She rises abruptly, flinging her hands before her, as though casting something away.

"I am tired, and stupid, and morbid," she cries ; "like Ferdie, making mountains out of mole-hills and fighting with windmills ; and yet, why did he look at me like that? It must have been my imagination, clouded by the snow," with a sickly smile, "and—and—I must dress."

Slowly she rises once more and advances to the dressing-table, and becomes aware for the first time of a letter addressed to herself lying on it. It is a foreign envelope, and bears a Venetian stamp. One glance at the boyish irregular handwriting, and she knows whose it is.

"Oh, Harry, my darling ! so you have not forgotten me," she whispers, "and have written me a Christmas letter—at last."

CHAPTER THE NINETEENTH.

LETTERS.

"*Hotel Danieli, Dec. 21st.*

"MY OWN DARLING SWEET DOLLY,

"Do you know that for nearly six months I have been sulking with you for not having taken the slightest notice of my last letter, which I wrote to you immediately after that very stormy interview with Sir Augustus in May."

So far Dolly reads, and then stops in amazement. "Stormy interview!—last May!—What does Harry mean?" Perhaps if she reads further he will explain himself, so she re-commences.

"In that letter I told you, as you know, all that passed between Sir Augustus and myself, and how I was resolved to let no amount of fathers come between us, and to win you when you were of age. And to that epistle, darling, I have had no answer. I waited in England some weeks for it, and then, wretched and unhappy, I made up my mind to embark on the Grand Tour and educate myself up to the right standard for your husband. But I was miserable, Dolly, and am so still, until I hear from you. Surely you do not push your filial obedience so far as to pay not the slightest attention to my letters, which, as you know, I only write on great occasions, in accordance with your wishes and your father's will? Or are you ill or unhappy, Dolly? Or, again, have Sir Augustus and Lady Travers come between us? Lastly, can it be —Dolly, forgive me the question, but I have thought and thought till I feel as though I were going mad—can it be that you have forgotten me? or, worse still, that you may have met with some one you like better? I am a brute to ask such questions of you, my dearest, but they are always at work at me, and leave me no peace. If I thought they were true I could not ask them. I would give you up, my darling, but there would be an end of me, for I could not live without you, Dolly.

"I have a horrid cold and headache, and am more fit to go to bed than to march about to marble-floored picture galleries or vault-like churches, but I suppose I must go on with it ; but the truth will out—I dislike it. I would rather catch one glimpse of your hand than gaze at all the Madonnas in Italy ; and there is not a church here to be named with our English cathedrals. But then you know I am not intellectual, and it is hard work for me to remember the names of all the great men who painted and sculpted, built churches, and shut up their fellow-creatures in prison. I like the Doge's Palace awfully ; somehow it reminds me of home : I cannot tell you where or how ; and of course I am familiar with a good many of the pictures, from seeing copies of them at Holme Regis. I delight in the gondolas, and the gondoliers are jolly fellows, and although I do not understand much that they say, we get on somehow. I have met with a few very nice people in my travels, who tell me what I ought to do ; and my duty here, I find, is to 'pick up' old lace and curiosities. So bearing you in mind, my queen, I have given myself over a victim to the

Jews, and bought a lot of (rubbish, I dare say) lace, old brass, Venetian glass, and all manner of treasures, besides photographs enough to stock a shop. I did the same at Milan, which is rather a jolly place, and all the other towns I passed through, and have had enjoyed beyond everything, wishing every moment I had you with me to show you those glorious mountains. I did lots of climbing, and find I am well suited to the work, having good health, great strength, and a cool, steady head. I will not inflict on you the names



"DOLLY TRAMPS BRAVELY THROUGH THE FRESH-FALLEN SNOW, WITH GEOFFREY AT HER SIDE" (*p.* 322).

to purchase a very large and substantial box to put them all into, besides sending a good many straight to England.

"And now, on reading what I have written, I see that I have never told you what I have been doing during these last six months, so I will begin at the beginning, and make it very short, or I shall bore you. I left England last June, and made, *viâ* the Rhine, for Switzerland, where I stayed till the snow came and I could do no more walking. That I liked and of all the mountains I ascended; suffice it to mention two—Mont Blanc and the Matterhorn—that you may perhaps have heard of before. From Switzerland I proceeded to the Italian lakes, and from thence by easy stages here, *viâ* Como, Milan, Verona, and a few minor towns. Here I wait to hear from you, and then work my way down to Rome, from whence I intend to go on to Naples and Sicily, and then back to dear old England. Don't think me an utter Goth, darling. If you were with me I should enjoy all these things, I

know I should, and as it is some of them I like awfully, but I am lonely, and home-sick and love-sick, and the fact is I am in for a bad cold, and I want you, Dolly. I did not leave England by myself. Savage and Vernon were with me all through my Swiss tour, and at Lucerne we were joined by Maggie and my aunt; but they all had to return home from Como, and I have continued my journey alone, although I might have joined forces with plenty of people. I feel unsociable with men and shy with women, so prefer to be by myself, but it would be very different if you were my wife, Dolly. Then—but never mind about then; if I once begin to write of it this letter will never be finished. This time two years, if you will be patient—and I know you will—we shall be man and wife, in spite of all the Sir Augustuses in the world, and I shall have brought you back here to see all that I have seen, and to teach me how to admire it. For the present, my darling, I send you a small Christmas present, which I hope you will like and wear for my sake. My own sweet Dolly, I wish you a very happy Christmas, to be quite superseded by the joys of this time two years, and a New Year that shall bring you one step nearer to being my wife. It is a great delight to me that I dream of you so often, but you always seem sad, and look at me with your sweet brown eyes, and never speak. And now, my own darling, good-bye; I shall count the hours till I see your handwriting. Ever yours till death,

"HARRY LEONARD.

"P.S.—It is two o'clock, and getting very cold. I hear constantly from Maggie, Uncle Tom, and Aunt Mary, but they say little or nothing about you."

Dolly reads the letter steadily through to the end without halting, but with mingled feelings, which succeed each other with every paragraph, commencing with indignation with her father for having concealed Harry's visit and letter from her, till, chased away by pity and love for Harry himself, to be again succeeded by that old feeling of almost fear at the strength of his devotion, the whole combining to leave her with a heavy weight at her heart.

Yet she has longed and longed for this letter, wondered why Harry has not written, inquired of the Bruces what had become of him, and now that it is come at last, is horrified at herself that she is not more pleased. And how he loves her! It comes home very forcibly to her, and her cheeks burn as the thought crosses her mind that she returns but scant measure of affection for that wealth of devotion he offers her. It even strikes a chill to her heart as she reflects on the words, "This time two years we shall be man and wife," and she hates herself for it. He is ill, lonely, sad; and although her whole heart goes out to him, longing to be with him, to comfort him, it is in the same measure, with the same impulse, as it would to a beloved brother. But that is not what Harry feels for her; her true, patient, loving Harry, who has always been good to her, whilst she——But what a good wife she will be to him! How she will interest herself in all he cares for, go about with him everywhere, be a real sister to Maggie, and forget she has ever had any other home but Holme Regis! And even as she pictures it all to herself, sees herself Harry's wife, and, in imagination, conjures up his fair, frank, sunburnt face, his honest blue eyes, his wide mouth, his sturdy figure attired in the tweed suit she had seen him in last, she gives a great sigh, for the tweed suit remains, but the face is different. The curly fair hair has given place to hair brown and straight, and the blue eyes to deep-set hazel ones, which look at her as though they could read her through.

She will not look, she will not see. Seizing comb and brush, she commences a furious onslaught on her wavy brown hair, attacking it with a viciousness that threatens to destroy the structure altogether, and is horrified to see before her in the glass such a white face and dilated eyes, as had she seen some ghost. At the same moment the gong booms through the house, and she becomes conscious of how much time she has been losing by the fact that her toilette is still far from complete.

Sir Augustus' majestic wrath, Lady Travers' honied reproof in prospect, combine to accelerate her movements to such good purpose that three minutes afterwards she is flying down-stairs, in time to see the whole party emerge from the drawing-room and file into the dining-room, and to hear Lady Travers' clear voice say—

"Sir Augustus never waits—for any one; it is a rule he makes, and dear Dorothy knows it."

She is about to follow humbly in her stepmother's wake, when she perceives that the gentleman allotted to her is awaiting her, ready to offer her his arm. She does not look up, but aware that a black coat is there, places her still ungloved hand on his arm, triumphantly bringing up the rear of the procession, secure from reproof.

"You ran that very close," says the owner of the black coat in a well-known voice, and Dolly starts, then smiles.

"I had letters, and forgot how time went," she responds, and commences dully wondering how it is he falls to her lot, who ought to have had Jack, or Harry, or George Cartwright. Lady Travers, looking behind her, seems to be of the same opinion, for she glances reprovingly at Geoffrey, and holding up her finger—

"Don't you know," she murmurs over her shoulder, "that I never allow my arrangements to be upset? You have turned everything topsy-turvy."

"Not in the least," answers Geoffrey coolly. "On the contrary, I have improved your arrangements, as you will see when you sit down."

"Do go to your right place," says Dolly imploringly. "I will look after myself."

"Unfortunately I cannot, for my place is occupied by a worthier substitute. Here we are," looking at the labels on the table. "'Miss Travers'—'Mr. Cartwright.' You must accept me as Mr. Cartwright this evening."

"It is too bad of you," says Dolly, trying to repress the smile that will rise to her lips, and even more sternly the gladness at her heart, as she sits down.

"Why, I see George Cartwright has taken in Miss Hamborough. Of course she ought to have had you."

"I do not see that at all; but the fact is poor George was in such despair at your non-appearance, so afraid of having to walk in alone, to which I had not the slightest objection, that at the last moment I offered him my place, which he accepted."

"And Miss Hamborough?"

"Of course she is delighted, for George, in spite of all they say of him, seems a nice boy enough, and of undeniable prospects; whereas I——well, you know all about me. It only remains to me to apologise to you for the exchange."

"Apologise!" exclaims Dolly involuntarily; "because you were so good-natured when you saw I was late."

"Then you do not mind?" once more turning that earnest gaze on her.

"No—yes—no—I mean—I am very glad. You see, I know you so well."

"Exactly," smiles Geoffrey; "and as you are dead tired, you need not talk unless you like."

A silence ensues, whilst Dolly takes a few mouthfuls of soup, and then makes a survey of the table. Opposite her sits Joan, evidently in one of her majestic moods, her lips set tight, and that unpleasant shadow of a sneer resting on them. By the bright light of the wax candles Dolly sees that she is aged, though handsomer than formerly, as she leans back in her chair, magnificently ignoring poor Mr. Talbot, who is next to her. On his other side sits Miss Hamborough, the Blankshire heiress, short, dark, and plain, who is trying hard to learn to give herself the airs she thinks incumbent on her position, but is too good-natured to succeed. She and George Cartwright are giggling together like two school-children over Rose's little affectations opposite them, as she leans back in her chair, talking with languid grace to Lord Marsland, who has, by some mysterious agency, donned evening attire, and is placidly eating his dinner at Wrangham instead of at Gorham. This circumstance has put the whole Travers' party into high good-humour, and Lady Travers and Sir Augustus are cheerful and genial, as become a host and hostess on Christmas Eve.

They number in all eighteen, a goodly array of nice-looking people, yet none to be compared, thinks Geoffrey, to the white-faced girl at his side, who eats nothing.

"You are thoroughly overdone," he says kindly: "too tired even to eat."

"I do not want anything; I am not hungry;" and then, fearful of drawing attention again to herself, she takes some chicken, and swallows a few mouthfuls.

"You will not think of sitting up to-night, I hope?"

"No, not to-night. Nurse is rested, and she thinks he will have a fair night, as he is better to-day."

The conversation drifts off to Ferdie, to the hour at which he is to have his Christmas tree, to his eager looking forward to Santa Claus to-morrow morning, till Mr. Ingram says, "I also had a letter before dinner with some rather interesting news in it, which will slightly alter my plans."

"No; have you?" and Dolly looks up eagerly.

"I am to leave Berlin, and am appointed to Rome, of all places the one I should choose: almost as good an exchange as I made half an hour ago."

Dolly blushes a hot vivid crimson, and is furious with herself for so doing.

"A very much better one indeed," she answers. "I do congratulate you. How you will enjoy Rome!"

"I know the dear old place well, which adds to its charms. Yes, I expect I shall make myself very comfortable there."

"And shall you know all the English?"

"Not all, I devoutly hope—for the English who travel are a heterogeneous lot—but a great many, I dare say. Why do you ask?"

"Oh!" blushing, "because I fancied every one who went abroad left their cards at the Embassy. I forgot how all the world travels, and that there would be loads of English of whom you would know nothing."

"If there is any friend of yours to whom I can be of any use, I——"

"No, really," with a strange unwillingness to mention Harry's name to Mr. Ingram. "I have very few friends."

"I wonder if you will ever come to Rome? How I should like to act as your cicerone, and show you all its wonders; forbid guide-books, and let you form your own unbiassed opinion, and hear what you had to say."

"It would be too delightful—everything so new and strange. I have never been out of England in my life, so you see my unbiassed remarks would be astonishing from their ignorance, if from nothing else. I am afraid, however, there is no chance of our finding ourselves in Italy. Papa has done so much travelling that I think he will be glad to anchor here for the rest of his life."

Geoffrey laughs most irrelevantly a low happy laugh, which is quite infectious. Dolly feels how this prospect of Rome has cheered and delighted him this evening, and joins too in his merriment: she knows not why, for she is in anything but a joyous mood. Joan sees their mirth, and her countenance becomes more rigid, whilst Geoffrey turns to Dolly and remarks—

"Your cousin is terribly shocked at our unseemly levity. We must try and behave better."

At the same moment Lady Travers gives the signal to rise, and the ladies commence filing out of the room.

Joan passes Geoffrey, who holds open the door, with averted head, and stalks into the drawing-room, looking neither to the right nor the left till Dolly comes up to her, greeting her warmly, and hoping she is rested. But her cousin's manner is quite altered from what it was this afternoon.

"I am not in the least tired," she answers coldly, "though I should think you were after your walk in the snow."

"It was hard work, certainly," says Dolly, "for we had to stop altogether from time to time, and make

little paths with the umbrella, the snow was so deep. I should like you to have seen me when I came in. I was like the sugar ornaments on the top of a cake, and Mr. Ingram too."

"It is, no doubt, a great consolation to have one's misfortunes shared," said Joan, with a sneer.

"Yes, it is."

"What is that about Mr. Ingram, Dolly?" asks Lady Travers.

"He was so good-natured, mamma," she answers; "he brought my ulster to the Lodge for me, and the most gigantic of umbrellas—I cannot think where he got it from—and came home with me, or I really do not know how I should have managed; it was blowing so hard, and the snow had drifted so."

"There is nothing like a man," says Joan sarcastically.

"And a good strong one like Mr. Ingram," puts in Mrs. Cartwright, "who could have lifted you through the snow-drifts if necessary."

Dolly is quite grateful to Mrs. Cartwright for her kindly interposition, for she sees by Lady Travers' face that she is displeased.

"Don't you think, Dorothy, my dear child, it would be better another time to tell one of the men-servants to fetch you at a certain hour, and bring your wraps, or, better still, take your wraps with you? I am sorry you troubled Mr. Ingram."

"It was very stupid of me," answers Dolly humbly; "and I too am very sorry that Mr. Ingram should have had the trouble."

"Then, why did you tell him to come?" asks Joan, with all her mother's bluffness and hardness.

Dolly feels the colour mounting to her face, the indignation shining out of her eyes, and makes a violent effort to control herself.

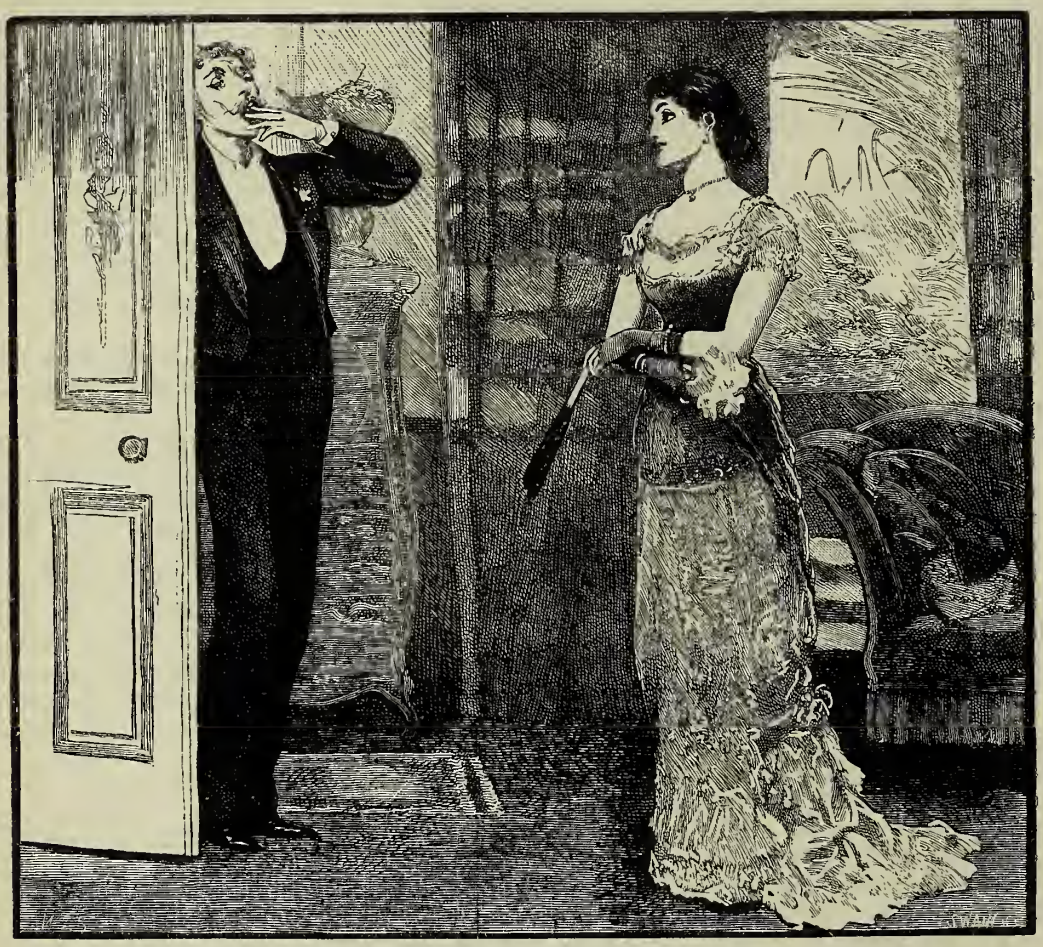
"I did not ask Mr. Ingram to come. I had no idea that he knew where I was gone," she answers, tolerably calmly; and Lady Travers, looking shocked, says—

"My dear Joan, what an idea! Dorothy, I trust, has been too well brought up to do such a thing."

A dead silence falls over the room, broken by the entrance of Rose and Miss Hamborough from the conservatory.

"I wish you would introduce me to your sister," says the latter; "she is so very pretty. I was looking at her all dinner-time."

"Yes, she is pretty," answers Rose condescend-



"'GOOD NIGHT, MISS TRAVERS,' HE RESPONDS, WITH A YAWN" (*p.* 331).

ingly, and casting a glance at her own handsome face in a long mirror opposite to her. "I think all ladies admire her."

But there is no time to effect the introduction, for Dolly has just gone up to Joan.

"Will you come to Ferdie now?" she asks, a shade more coldly than usual. "He wants so very much to see you, and I am afraid he will not go to sleep for waiting."

Joan rises, feeling somewhat humbled in presence of this girl to whom she has just been so rude, and who seems too proud to resent it, and side by side they walk out of the room. On the staircase they begin to talk of Ferdie, and on this safe topic they continue until they reach his room, where, with wide-open glistening eyes, he awaits them. Dolly's wounded spirit finds it a great relief to be once more with her boy, who loves her so dearly, thinks her so perfect, and never misunderstands her. He is languidly pleased to see Joan again, and says so, so pathetically, that she feels a lump in her throat as she gazes at the little wasted face, shorn of all the beautiful fair curls, and remembers how much she used to dislike this child. Dolly asks her not to stay too long, as he ought to go to sleep, and very soon she departs down-stairs, soberer and sadder than when she came up, leaving Dolly to sing him his nightly lullaby.

"Kiss me, Ferdie," says the latter as soon as the door has closed on her cousin; "kiss me, and tell me you love me."

"Love you, Dolly! why, you know I love you better than any one in the world;" and the two little arms close like a vice round her neck, and hot feverish kisses from the dry lips are rained upon her face.

"My darling, my own little darling!" she ejaculates, and feels quite comforted for Joan's remarks and Lady Travers' injustice. She sings Ferdie to sleep, as she does every night, and then softly leaving the room, with head erect and resolute mouth, she descends the staircase to the hall. Here, instead of turning to the right, where lies the drawing-room, she makes straight for her father's sitting-room. He is there writing letters, as she knows, for she heard him tell his wife that he should not be missed, and he must retire thither for that purpose, so with trembling fingers she knocks at the door and is admitted.

CHAPTER THE TWENTIETH.

PLEADING HIS CAUSE.

"I HAVE no time to spare to you, Dorothy," says Sir Augustus, looking up from his papers, as Dolly timidly asks if she may speak to him for a few minutes.

"I have very little to say, papa," she pleads; "I shall not keep you long. I heard from Mr. Leonard to-day."

Sir Augustus looks up in earnest now, and notes, almost for the first time, that Dolly has grown into a woman, and one, moreover, who looks as though she meant what she said.

"You did, did you?" he asks menacingly. "It is remarkably cool of you to announce it to me in this way when I have forbidden any communication between you."

"He tells me," pursues Dolly, and her colour heightens, "that he came here last May, when I was at St. Leonard's, after his father's death, and had an interview with you, and, writing to me afterwards, told me the result of it. I never received the letter, and I never knew he had been here. Papa, please tell me all about it."

"Your coolness," answers her father, "is quite amusing, and no one but I would dream of answering your questions. But, to show you how weakly indulgent I am to my children, I will tell you what you wish to know. Mr. Leonard did come here last May, proposing a second time for your hand, and I a second time refused it. If he had the riches of a Rothschild, I would never give my daughter to a man of bad character."

"Bad character! Harry! Papa, what do you mean? Harry is the most honourable, the best, and truest of men."

Sir Augustus smiles that provoking smile of superior wisdom that older people so often assume to younger ones, and men to women.

"My dear child," he says, "the less you ask about this matter the better. Young girls like you cannot know the ins and outs of a man's Oxford career. Suffice it that I could not for one moment permit the marriage."

"Never, papa?"

"Never."

"Do you mean to say you wish me to break off my engagement with Harry?"

No, Sir Augustus by no means intends that, no more does my lady. Would she were here to advise him!

"I do not choose," he answers after a minute's pause for reflection, "to coerce any daughter of mine into a duty that lies plainly before her. I do mine, and that is sufficient, and it is my duty to forbid you to marry Mr. Leonard."

"But, papa, if Harry's character were cleared, as I am sure—as I know it could be—would you not then allow us to marry?"

She has drawn closer, quite close to him now, with a sweet imploring look in her eyes, and her hands unconsciously clasped in entreaty.

"Oh, papa, you do not know how good, how true he is, and how—how fond of me! It will break his heart."

Sir Augustus smiles once more.

"When you are as old as I am you will have discovered that hearts do not break so easily. Probably his will not. However, do as you like, but remember I neither sanction nor countenance your engagement or marriage with this young plebeian."

"Harry is a perfect gentleman, papa."

"So I should imagine," with a sneer, "from his father's own account of his origin."

Dolly lets the sneer pass.

"Papa," she continues, in a very low voice, "he and I can never give each other up. He wants me to

marry him when I am of age, and indeed, indeed, there is no reason why I should not."

"Except the one I adduced just now."

"I don't believe it. I do not believe one single word against Harry. Papa, I have known him ever since he was six years old, and he was always the most high-principled, the most truthful of boys. The worst that could be said of him was that he was very idle and fond of play, and I fancy he was much the same when he first went to Oxford. Latterly he read very hard."

"You know so much of the world and its wickedness, do you not?"

"I know Harry," she answers with simple faith, "and he would never do anything to be ashamed of."

"I am weary of the discussion, and have no time to argue with my daughter. Do as you like: be engaged to Mr. Leonard or not, as you choose; but remember," and Sir Augustus' face lengthens perceptibly as he brings out his words with hammer-like precision, "if you marry him, I and your brothers and sisters have nothing more to say to you, and I always keep my word. Now go."

The tears well up in Dolly's eyes as she feels how utterly alone she is in her battle for right and truth, her battle for Harry. Hot vehement words rise to her lips, to be choked back again; the despair of making any impression on the cold machine who is her only parent, and which used to make the misery of her mother's life, rouses her to a supreme effort.

"Papa," she reiterates in a half-choked voice, "please—please help me. Harry"—with a bright burning blush—"loves me so dearly, that even if I would I dare not give him up. It might wreck his whole life. I do not say it from vanity," she cries, moved by the sneering smile on her father's face; "he thinks a thousand times too highly of me. He loves me"—and here her voice breaks—"a great deal too well; I say it for his sake. Oh, papa!" touching his arm with trembling fingers, "do help me!"

"Help you!" he exclaims, struck by the expression, "help you to disobey me! No, indeed."

"Then, papa"—and Dolly no longer pleads—"then, papa, I must make my choice with Harry. I will, however, do nothing without your permission. May I write to him to-morrow?"

"I will see."

"I have one thing more to ask, and then I will go. May I make our engagement public?"

"Good gracious! No!" shouts Sir Augustus, moved at last out of his usual icy demeanour.

What would the world say if it knew that he was refusing his consent to his daughter's marriage with a man of large fortune and of a fine estate for a reason which existed almost entirely in his own imagination? He positively shivers at the idea.

"I absolutely forbid your revealing your so-called engagement to a single soul. I would not have Rose even know of your conduct for the world. The example of a girl who persists in braving her father's displeasure in order to marry a worthless, ill-conducted man of low birth would be a terrible shock to her innocent mind. No! As long as you are under my roof this disgraceful engagement shall not be made public."

Dolly says nothing. She is too wearied to fight a second battle, or to attempt to induce her father to retract any of the insulting epithets he has just heaped upon Harry; but she feels that everything and every one is against her, to prevent her acting as truth and honour tell her she ought to act.

She passes swiftly through the hall on leaving the study, for she hears sounds of breaking up in the drawing-room. The clock strikes eleven in full sonorous tones. She has been with her father three-quarters of an hour. Three-quarters of an hour wasted! Safe back in her room, she opens the window and looks out. Her face is hot and burning, and, cold as it is, she feels she needs the night air to cool it. The moon shines down on the slumbering earth. The snow has ceased to fall; it is all so still, so white, so cold. The bitter air fans her face, and she hardly feels it. Afar the ice gleams, and her thoughts go back dully to the skating she enjoyed so for one short hour this morning. It is Christmas Eve. How many happy Christmas Eves has she spent at Holme Regis, where every one loved her! How many happy Christmas Days, when she, as a child, reigned supreme! And yet—would she like to be there now altogether?

Suddenly, through the night air, comes the clang and the chime of the church bells, ringing in anticipation of the happy morning. They smite on Dolly's ears, bringing back only too vividly a thousand memories, and at the same moment a gust of keen frosty air makes her shiver all over. She shuts the window hastily, but she can still hear the bells, and she bursts into a tempest of tears as she sinks down by her bedside and hides her face in her hands.

Down-stairs the guests are dispersing for the night. Joan is just gone, and in the drawing-room Lord Marsland is openly yawning, and wishing, *sotto voce*, to Mr. Talbot that the ladies would take themselves off, so that they may repair to the smoking-room. He rather regrets now that he allowed himself to be over-persuaded by Lady Travers to stay here, for although Rose is uncommonly handsome, and will have a large fortune—so Charlie Pollen told him—yet it is a dull house compared to Gorham, where there are a number of young married women, and——

"Good night, Lord Marsland," interrupts Lady Travers in her most dulcet tones. "I cannot thank you enough for having entertained us so charmingly this evening. I really dread meeting Lady Pendleton. She will never forgive me for having decoyed her most attractive guest."

"Oh! Lady Pendleton knows me well enough to be aware that I always do as I like, and she has plenty of attractive guests. There is an awfully jolly woman there, you must know; every one knows her: the woman whose picture was in the Academy this year—with the wonderful eyes—Mrs. Whittington White. Of course you know her."

"No; I have not that honour. Naturally I might visit her in London; but no one knows who or what

Mr. Whittington White was, and Sir Augustus is so *very* particular."

With this parting shot at Gorham, Lady Travers sails out of the room, whilst Lord Marsland remains lounging on the ottoman, oblivious of the fact that he is the only man in the room to open the door for his hostess. Rose comes out of the conservatory with a bunch of white camellias in her hand, and passing through the room, throws him a little nod.

"Good night, Miss Travers," he responds, with a yawn. "I hope those dreadful bells will not disturb your slumbers," and rises with alacrity, for this is the last of his good-nights to the ladies.

In the hall Geoffrey is confabulating with Lady Travers, and as he hands Rose her candlestick he asks, "Where is Miss Travers?"

"Gone home, some time ago."

"I mean your sister?"

"Oh, Dolly! I suppose she has been up-stairs with Ferdie. She disappeared ages ago."

"I was afraid she was not well, she looked so ill at dinner."

"I think she is all right: probably asleep by this time, or else putting the last touches to Ferdie's tree. Good night, Geoffrey." And, with another little nod, Rose disappears up the staircase, and enters her mother's room.

"Mamma, I think Geoffrey is falling in love with Dolly," she remarks carelessly, as she stands by her mother's fire.

"Eh! What?" How rasping and shrill the tone.

"I say I think Geoffrey is losing his hitherto well-regulated heart to Dolly."

"My dear child, what has put that into your head?"

"A variety of little things, all of them trivial, but sufficient to make up a sum-total. He would be a very nice brother-in-law. I am very fond of dear old Geoffrey when he does not take it into his head to lecture me."

"I do not think you need look on so far, my dear. Your father would never consent to such a thing, even if it were likely to come to pass, which it is not."

"Why not, mamma?"

"For various excellent reasons, which I have neither the time nor the inclination to tell you now. Be it as it may, you must go away, for it is very late, and I am tired; and above all, never repeat one word of this nonsense to any one, especially not to Dolly herself."

Rose disappears, pouting, half resolving she will knock up Dolly, and see what she has been about; but, thinking better of it, repairs to her own room, leaving her mother much perturbed in her mind. She has known Geoffrey Ingram quite long enough to be aware that he is not lightly to be turned from anything on which he has set his heart, and if it is set on Dolly, he will not rest until he has won her. He is no boy, like Harry, to be deceived by Sir Augustus' pomposity. Probably he knows all about the late Mrs. Travers' settlement and will, and, worse still, may reveal to Dolly that on her marriage she ought, by rights, to come into fifty thousand pounds. Lady Travers trembles as she reflects on that fifty thousand pounds, so skilfully hitherto concealed from the person it most nearly concerns. How she blesses Harry, unconsciously acting as guardian to the money, and interposing his most uninteresting self between Dolly and all aspirants to her hand! Yet Geoffrey is very dangerous. Harry is away, the marriage is forbidden, no letters have passed between the two for ages; whilst, on the other hand, Geoffrey is here, on the spot, in constant intercourse with Dolly—a man whom any woman might only too easily learn to care for—a man to throw a boy like Harry utterly into the shade. If Rose's suspicions are true—and Joan seemed to point at the same thing this evening—then something must be done. Geoffrey must be told of Dolly's engagement, under promise of inviolable secrecy, for it would never do for it to get bruited abroad; and meanwhile Lady Travers will watch for herself, and, if necessary, bring out the information at the right time.

"Those dreadful bells, what a noise they make," she murmurs to herself as she reviews the various plans in her head previous to going to sleep, to be woke up from her first slumbers by the carol-singers.

"Peace, good-will towards men," is wafted into the room, and Sir Augustus hears it too as he slowly ascends the staircase; but his only comment on it is to quicken his footsteps, and retire wrathfully into his dressing-room.

Dolly hears it too, for she has never been to sleep, and she listens to the old familiar words, which always bring back Holme Regis to her so forcibly, with many mingled feelings. She has taught the boys those carols herself, and she is pleased at the way they are singing them. Pitying the poor fellows out in the cold, her thoughts revert to her darling boy—her Ferdie—and how probably this will be his last Christmas on earth. She thinks of poor lonely Harry in a foreign hotel, of Uncle Tom and Aunt Mary, of all those she loves, till the carols and the people melt into a confused mass in her mind, and she falls asleep with the snow falling around, and herself sheltered under a large umbrella.

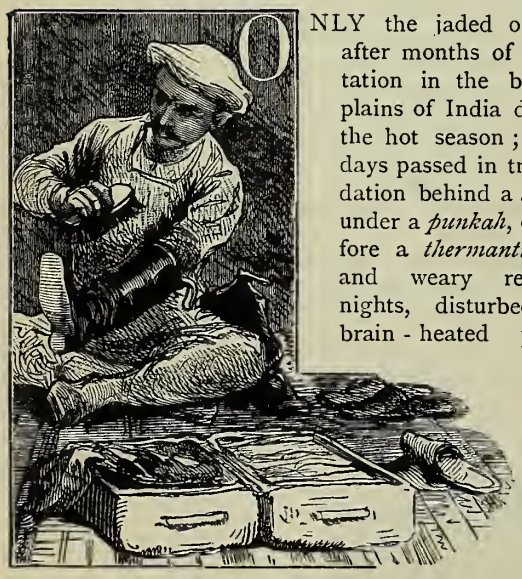
END OF CHAPTER THE TWENTIETH.





CROSSING THE GUGGUR.

OFF TO THE HILLS OF INDIA.

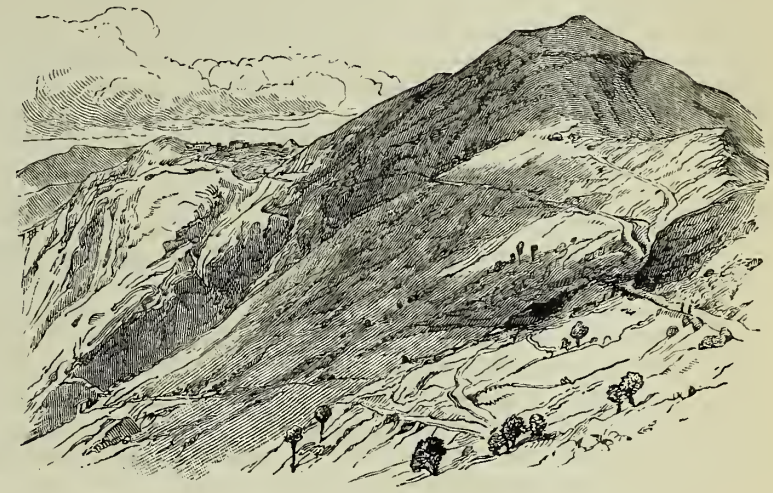


ONLY the jaded official, after months of vegetation in the blazing plains of India during the hot season; after days passed in transudation behind a *tattee*, under a *punkah*, or before a *thermantidote;* and weary restless nights, disturbed by brain-heated phantasms, and the vicious buzz of the blood-sucking mosquito; only the man still labouring on with energy all but exhausted, appetite broken, and temper made fractious and irritable in spite of the inherent benevolence of his disposition, can duly appreciate the fulness of the joy one experiences in leaving the Gehenna of these torments behind, and setting one's face towards those everlasting hills which seem to one even as the gates of Elysium. See how the expression on the countenance of our toiling Tantalus relaxes as he opens the official document which tells him that his application for leave has been granted. See what renewed activity characterises all his movements, which before were languid and spiritless. It does not take him long to get his arrangements made for departure, and at the earliest moment at which he can conscientiously avail himself of his leave, he is off. To see the nimble figure which descends from the railway carriage at Umballa, you would hardly recognise in it the dejected person of the Deputy Commissioner of Frizzlepore. See now with what hungry eagerness he strains his eyes out of the *dak-gharry* to catch the first glimpse of the grey outline, shrouded perchance in the wreathing mists of morning; for the season of the rains is approaching,

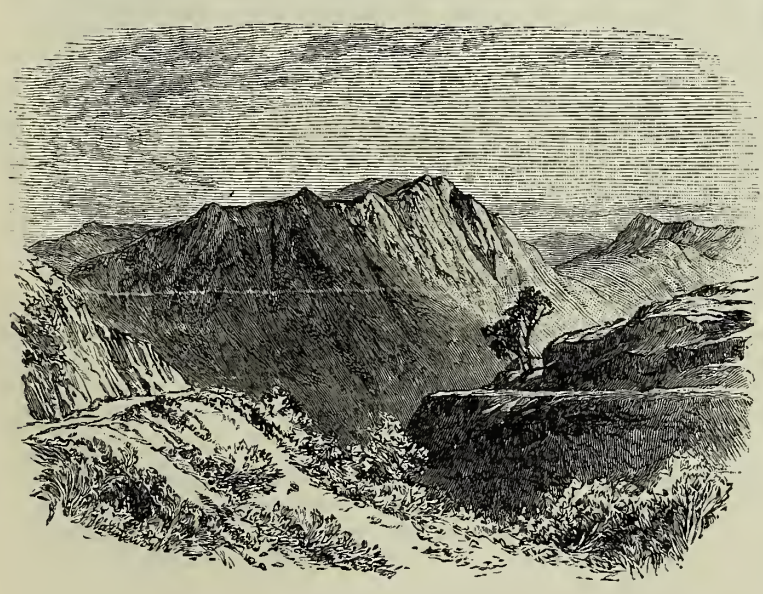
and already the coming cloud-battalions have sent forward their vanguard to steal up through the valleys, and occupy the craggy summits of the upper ranges. His only anxiety now is, will the Guggur be swollen or not?

A strange stream this Guggur, and one which may well give our traveller anxiety, since the possibility is on the cards that, with those ominous clouds gathering in the hills, he may be detained on its banks for some hours. For the Guggur is a rain-stream which is fed by numerous and important channels, through which the floods that descend upon the mountains are carried away into the plains.

Where the road from Umballa towards Simla crosses it, it has a wide shallow bed, with a low muddy island in its centre. Under ordinary circumstances this bed is for the most part quite dry, intersected by two or three insignificant channels of sluggishly flowing water, which any man can wade through without the water reaching to his knees. But when the rain-flood comes down, as it sometimes does, very suddenly, after a heavy downpour in the mountains, this insignificant stream swells into a mighty rushing torrent. The dak-gharry (literally post-chaise) by which the journey is made, stops on the left and south bank of the river, and here the horses are unharnessed and exchanged for strong bullocks, which in their slow lazy fashion drag the carriage through the bed of the stream.



JUTOG, FROM THE SIMLA ROAD.



TARA-DEVI, FROM JUTOG.

The writer has arrived at this point, to find to his satisfaction that the stream was not in flood, and easily fordable; for at that very moment a man was in a leisurely manner driving a flock of sheep across it. Yet during the short interval sufficient to change the draught-beasts, the torrent came down like a wall of water, and swept man and sheep and all away. Fortunately they were all recovered a little lower down the stream.

Of course he had to wait as patiently as he could until the waters subsided sufficiently to permit of his crossing; but then there was the apprehension of fresh rain in the hills raising the volume of the river again, so that the first moment at which crossing became at all possible was watched for with solicitous eagerness.

At last, in spite of the representations of the natives who, on these occasions, crowd round the interrupted traveller with mercenary offers of assistance, the passage is attempted. The gharry is emptied of every article of luggage, the heterogeneous mass being piled up on the roof, whither the traveller himself with his servant has to take refuge. Two yoke of oxen have to be attached to the vehicle, and then, with some forty natives howling and shouting vociferously on either side, the perilous start is commenced. The bottom is so loose, and the current so strong, that the bullocks, nearly up to their backs in water, can barely keep their footing. The torrent rushes right through the carriage, eddying noisily around it as it goes, and if it should happen to rise a few inches higher, there is every prospect of the whole bag of tricks being overturned and precipitated into the stream. A deafening babel of yells and shouts kept up incessantly by the dusky and almost naked crowd of natives struggling and straining at the wheels, or striving to maintain the gharry erect against the torrent, adds to the excitement of the situation, and an indescribable frenzy of glee in the wildness of the situation possesses the traveller.

It would hardly be believed in England that travelling along this road, which is the only route for Government officials, from the Viceroy downwards, journeying annually to and from Simla, and for all the busy traffic which their equipages and provision entail, should be subject to the occurrence of adventures like this. Yet so it is. The Ganges, the Jumna, the Sutlej, the Beas, and other much mightier rivers have been spanned with bridges, reflecting the highest credit on their constructors; but the turbulent and treacherous Guggur is still left in its truculent freedom, to work its wayward will upon the crowded traffic of this northern highway.

There is another very singular feature about this Guggur. If you will take a map of the Indian peninsula and draw an almost straight line from Simla through Udaipur, in Rajpootana, down to Cambay, on the western coast, you will find that such a line indicates pretty closely the watershed of the great rivers of Northern India. All rivers rising to the right, or east, of this line fall into the Bay of Bengal; while all rising to the left, or west, fall into the Arabian Sea. The whimsical Guggur, however, maintains its caprices even in this respect, for rising, or rather being formed by streams which rise, to the east of Simla, it turns sharply round to the west, after emerging into the plains, crosses our line of watershed between Umballa and Kalka, and ultimately, still true to the perversity of its nature, loses itself in the sandy deserts of Bikanir.

But our impatient traveller cares little what escapades the Guggur may choose to indulge in, so that he gets safely across it, and having had the horses put into the shafts again, is being whirled along the road which brings him every moment nearer and nearer to his prospective haven of rest. His heart gladdens within him as the vehicle rattles by the shady gardens and through the narrow lanes of the village of Pinjore. He contemplates with growing enthusiasm the mysterious outlines of the Sewalik ranges, so productive in fossils of antediluvian epochs, and indulges in a deep-drawn "At last!" as the gharry comes finally to a halt in front of the hotel at Kalka. He does not care to stop long, however, amid the stifling odours of this busy little town nestling at the foot of the hills, but he is eager to get as soon as he can out of the seething atmosphere of the plains, up into the Olympic regions, where the air is cool, and the breezes fresh and invigorating; where the scent of the pines comes from the forests, and the friendly note of the cuckoo is wafted across the silent valleys. So, after hasty ablutions and a scanty meal, he jumps beside the driver into the *tonga*, which by this time has been got ready for him, and away they go merrily behind a pair of sturdy little ponies, breasting the hill in valiant fashion to the encouraging persuasion of the driver, shouting "Shavash mera butcha!—sher ka kam hy!" and similar animating ejaculations. How the spirit rises with the altitude attained! How the lungs expand to the rarifying atmosphere! How the blood glows to the freshening temperature! How the whole being exults, as in the first new birth of freedom!

Verily—were it not for the presence of the driver beside him, and the servant in the back seat—our emancipated provost could unquestionably vent his feelings in a wild shout of exultation.

It is almost impossible to realise fully the influence of this sudden change of climate without having actually experienced it. You leave the flat uninteresting plains, over which hangs a reeking mist, seeming only to intensify the fulvid glare of the brazen sky above you. This ichorous fume is what you have to live in, to inhale, until you gasp again for a little of the displaced oxygen which ought to reanimate the thickening blood. If wind blow, it does not better your condition much, for it is like the scorching blast of a smelting furnace. If rain fall, the air resembles the muggy exhalations of a sudatorium, causing your skin to transude through every pore. The very crows, a species much more numerous, garrulous, and self-asserting than the English one, stand open-beaked and gasping in what of shade they can find, and the world seems tolerable only to the salamander and the gadfly.

From this Tophet you may rise in a couple of hours to a climate fresh, clear and bracing, as of summer in the Helvetic Alps; a change so sudden and complete, that it appears like one of the rapid transformations we read of in the tales of the "Thousand and One Nights." No one who has not experienced the depressing influences of literally the "lower regions," can realise the exhilaration of this magic change into the upper ones. How delicious it is to hear the sighing of the breeze through the waving pines, while you can look down upon the reeking mist below you, stretching away in murky folds to the hazy horizon-line! How welcome the hum of bees, and the noisy chirrup of the cicada, in place of flies, mosquitoes, and the hundreds of other entomological and reptilian torments which aggravate one's bitterness in the hot season below! How sweet to watch the cloud-shadows chasing each other on the massive hills, or wreathing themselves in tender affection around their summits, when for months you have seen nothing but a blazing sky, unchequered from morning till night by a single cloudlet, with that awful and everlasting sun beating down upon you, reigning supreme over the glaring firmament, and asserting his power with malevolent cruelty! How enchanting, after living for months together in a stifling cantonment, like Agra for instance, where the mango-groves and palm-trees are the only objects to break the even flatness of the view, to be amongst these mighty hills once more, beholding now their summits towering up into the clouds, now their pine-clad flanks sloping down into the sheltered valleys beneath, where the water is leaping in wanton sport from crag to crag till, tired of its play amid the sunbeams, it ripples cool and placid among the glittering pebbles!

From Kalka the road rises steadily, yet by a tolerably easy gradient, so that in little more than two hours we reach an altitude of about 7,000 feet above sea-level. But the whole distance to be traversed by this road, from Kalka to Simla, being fifty-seven miles, occupies about eight hours.

The wonderful way in which this road has been constructed—sometimes hewn out of solid rock, with a perpendicular wall on one side and a giddy precipice on the other ; sometimes bridged across gaping chasms, which become roaring torrents in the rains ; always winding in and out with the tortuosities of the sinuous contours, so as to maintain as nearly as possible a uniform level—renders it a model of the industry, patience, and skill of all concerned in planning and executing it. The whole of its course exhibits a continuous panorama of most majestic scenery. We pass, perched on separate summits, the military posts of Dagshai, Kasouli, and Sabatu, used partly as sanitaria for our European troops, partly as military stations for the protection of Simla. Another military detachment is stationed at Solon, a point very nearly halfway between Kalka and Simla, where the traveller, if he pleases, may obtain refreshments and an hour's rest at the welcome wayside inn.

Here there is a most lovely view, stretching away across the valley of the Giri, up in a north-easterly direction to the misty outlines of the Chor, a peak well known to all the frequenters of both Simla and Mussoori. As we approach the former station, the scenery increases in beauty and interest. To our left we discern the picturesque cantonment of Jutog, which is generally garrisoned by a battery of mountain-guns, and far beyond, rising over ridge upon ridge of intervening mountain ranges, we may perceive the outline of "the snows."

And now we come to the mighty rocks of Tara-Devi, frowning down upon us in rugged outlines which cut directly across the zenith, while on the other side of us is a sheer drop of apparently some thousands of feet, all of which we may contemplate with perfect equanimity, for, thanks to the boldness and intrepidity of our engineers, the roadway is hewn in one long horizontal line along the rock-face, being well protected on the Khud side by a strong parapet-wall.

Suddenly the dark green pyramid of Jacko comes into view, and amid the crowded deodars, pines, ileces, and rhododendrons is disclosed to us a scattered congeries of picturesque dwellings, clustered thickly at one spot, but stretching, by more or less isolated habitations, far away both to right and left of us, and in an hour more we are in Simla.

THE INCONGRUITIES OF ART IN DRESS.

BY MRS. STRANGE BUTSON, AUTHOR OF "THE ART OF WASHING," ETC.



Fig 1.

PUBLIC taste in costume and decoration has, during the last two years, received endless lessons from numerous authoritative pens ; and by perpetual references to, and quotations from, the fashions of past centuries, we are assured that we attain that El Dorado of art called "high." To this coveted goal our artistic women, and those who believe themselves to be artistic, have struggled with more or less success. There remains, however, a large proportion who, with most praiseworthy desires to display art in their clothes and surroundings, end by collecting about themselves a very heterogeneous *entourage*, and both in their persons and dwellings present incongruities that forcibly remind us of the child's toy-box of coloured figures, when the wrong legs are adjusted to the wrong bodies, and placed in a shop of mixed curiosities.

There never was a truer saying than one which emanated from a celebrated art-critic, that "in matters of art the public are always in the wrong." This is exemplified by the manner in which any new idea of form or colour, however inappropriate, gets "run to death" when once it becomes public property, till we see the colour or the form perpetuated and vulgarised *ad nauseam*. Take, for instance, the "Langtry hood"—this, originating as a useful appendage to an ulster, has dwindled down into interminable little, useless, unmeaning bags, or folds, of unsuitable materials, put on any sort of costume as a supposed decoration, for they certainly have no other *raison d'être*.

Nothing so forcibly strikes the innately æsthetic eye as the painful incongruities that are displayed by those who aspire to manifest artistic tendencies in their habiliments, nor the promiscuous way in which one and all rush into so-called art in dress, where those of purer taste would hesitate to commit themselves ; for nothing is more satisfactory than an old costume rigidly adhered to and carried out, nor so distressing as a *pot-pourri* combination of different periods in the dress of one person.

It is to be deplored that the false canons of taste produced by the bad æsthetical and intellectual education of some who write as authorities on the art of dress and decoration, should fatally cause false habits of judgment in those who put their trust in them ; for, starting from erroneous and imperfect information, they but teach the exaggerations and inconsistencies which vulgarise true art and beauty, thus misleading the public they think to instruct. The real artist cannot tolerate what is untrue, whether in form, complexion, or costume ; and where form is fictitious, complexion false, and costume incorrect as a copy of a certain period, the artist's eye and sense of truth



FIG. 2.

instantly detect the meretriciousness of the whole effect, and are proportionately shocked. Painted eyes that look like no natural eyes ever did; rouged and painted cheeks, utterly unlike the peachy hue of real health, and totally destructive to that great beauty of young faces—a blush; lips which resemble only those of a doll in their excessive redness; and skin of that peculiar bluish-pink tint never seen on healthy mortal face, except in those of slow circulation after long exposure to a bitter nor'-easter—all these give a shock not easily forgotten to those of refined æsthetic feeling. There is no disgrace in having a bad complexion, except when the result of intemperance; by medical aid it is often remediable, if not curable.

Incongruities pursue us even in the matters of false teeth, and hair when not well arranged. Teeth people must have, or their health suffers, but it is not necessary for dentists to provide any one with a row of impossibly even, untoothlike pieces of white china,



FIG. 3.

or ivory—this is at once incongruous. No one will blame you for being bald, but add sufficient hair of a similar colour to look as your own—not as it never did. We should not then suffer from such anomalies as those often presented by a mountain of false, light brown curls, with the grey hair escaping beneath. If your hair is grey, remember that few forms of vanity are more contemptible than that of being ashamed of grey hairs. Why should you be? Old age may be as sweet and naturally lovely as youth, and though no cosmetics can prevent wrinkles, there is many a wrinkled face with its deep, true eyes, and grey or white hair, which is more lovable and beautiful than the most fascinatingly painted cheeks and delicately shaded eyes.

But now let us pass to those incongruities in costume which startle us continually, not so much in



FIG. 4.

women of moderate height as in "the more resolute sisterhood of small growth, who will do anything to come out important," in spite of the painful fact, obvious to all but themselves, that fancy dress needs a certain height and presence to show it to advantage, unattainable by a smaller altitude, and becoming then only a caricature.

My first illustration shows the incongruity of a small, insignificant woman, having the head extinguished in a large irregular mass of black velvet, intended to follow the form of a Holbein headdress; to this is added a modern ulster with a hood of proportions sufficient to hold a baby after the manner of a Connemara woman, much less to envelop the said Holbeinesque headgear. This removed discloses a sage-green dress, made and trimmed in the extreme of modern tight fashion, with, oh! a fourteenth century sleeve! A ponderous velvet bag, heavily mounted in silver, and hung on at the side, completes the costume, giving a strangely disproportioned and over-weighted effect to the little personage.



FIG. 5.

Fig. 2 shows some incongruous combinations in a Tam O'Shanter cap worn with a pinafore dress ; a slashed sixteenth century dress, with a poke bonnet of our grandmothers' time ; again, in Fig. 3, a Duchess of Devonshire hat, with a modern jersey ; and a dolman mantle, with a fishwife's handkerchief *toque* on the head. Evening dress also is not safe from these so-called art-authorities, as well as the public. Imagine, as in Fig. 4, a sky-blue satin made thus. What would our great-great-grandmothers have thought of a sac on a *corsage monté* with lace *plastronné* down the front? Still less would they have tolerated the addition of a long puffed sleeve, nor, I doubt, a waist-belt—a combination entirely incorrect, and therefore untrue.

Thus we see art in dress vulgarised by those who profess to be its most devoted priestesses and adherents, in a way that our "fashionable women" (a class held in much contempt by the pseudo-artistic) would never be guilty of. The thoroughbred woman will never make herself conspicuous by any exaggerations or eccentricities in dress or manners, and her good taste is instinctively recognised by the true artist in the perfect harmony of all that she wears and surrounds herself with, whether following the fashion of the day or otherwise. It is a fact worthy of remembrance for all time that vulgar eccentricity is not originality, any more than notoriety is fame ; and eccentricity often degenerates into vulgarity pure and simple.

One of the chief reasons why the artistic dressing of women seems so especially incongruous is owing to the fact that men vary so very slightly in the form and fashion of their garments. There is no idea of *their* venturing to don a seventeenth century hat, nor slashed doublet, and valiantly defying remark and criticism, appear in the streets or parks



FIG. 7.

thus attired ; so, with the exception of fancy balls, they leave change and variety of form and colour to the women, and are content to remain in striking and incongruous contrast to them. See how dissimilar, in Fig. 5, a man and woman when dressed in the costume of two different periods appear, compared to what they do when both, as in Figs. 6 and 7, adopt the fashion of their time, whatever time that may be.

It remains, therefore, a question whether greater good taste is not displayed when the women of the period dress in such moderate obedience to the dictates of ever-changing fashion as to be in accordance with the masculine costume of the age. It is still further a question whether in the ancient costumes, with their very uncomfortable, ungainly exaggerations of form, lies the highest expression of art in dress, or even its highest types. The fact of their faithful reproduction in the pictures of old masters does not constitute them examples of æstheticism. Why rely on the past for new ideas? Should we not rather, with the countless inventions and enlightened methods which the times daily place at our



FIG. 6.

disposal, improve and look forward, than be perpetually returning to those ages when even art was in its crudest state, and the variety of materials as limited as the appliances for utilising them?

In the mania to be picturesque (which afflicts those of artistic proclivities) it is certainly advisable that there should be some lines laid down on which people may safely travel in matters of dress, and from which it is unwise to diverge, or we should be more often startled by those who, with a glorious independence of good taste, take art's magic name to cover the multitude of errors they commit when following their own sweet wills.

That fashion should have vagaries, so much the better, anything for greater originality, carefully avoiding all approach to crystallised conventionalities; but —and this is a long "but"—if a costume of a past century is to be worn (and if too remarkable for outdoor wear, it is a pretty custom to have fancy dress for evening wear) in the name of art do let it be done correctly, and not as a mass of incongruities.

KINDERGARTEN TEACHERS.

BY THE AUTHOR OF "HOW WOMEN MAY EARN A LIVING," ETC.



A PECULIAR interest is attached to Kindergarten Training Colleges, from the fact that they prepare women for almost the only remunerative employment open to them which is not already overstocked. The demand for trained Kindergarten teachers is large and increasing, and very much exceeds the supply; the authorities at the various Colleges agree in saying that they receive daily applications for teachers, which they much regret that they are unable to satisfy.

Most of our readers are aware that the Kindergarten system of education was devised by Froëbel, a German, who died some thirty years ago; and subsequent experience has proved it to be the best known method of instructing young children between the ages of three and seven. It aims at cultivating their reasoning powers, teaches them to think and observe, and converts their lessons into an amusing and fascinating game.

About six years ago a Froëbel Society was formed in London, with the objects of promoting co-operation among those engaged in Kindergarten work, of spreading the knowledge and practice of the system, and of maintaining a high standard of efficiency amongst Kindergarten teachers. The following are the practical aims of the Society:—

1. Lectures, discussions, and public meetings.
2. Publications, including translations.
3. The examination of students, and the granting of certificates of their qualification to become Kindergarten teachers.
4. The inspection and registration of Kindergartens.
5. The formation of classes for nurses.
6. The establishment of a central Kindergarten and Training College in London.
7. Assistance in the establishment of local Kindergartens.

The active Honorary Secretary and Treasurer, Mrs. E. Herry, 27, Upper Bedford Place, London, will gladly give further particulars respecting the Society to anybody interested in it.

The examinations are regularly held, and are open to all candidates over the age of eighteen who can produce a certificate of having passed some recognised public examination in English subjects, or satisfy the Committee that they have received a good general education.

The subjects of examination are the theory and history of education, organisation and methods of the Kindergarten, and the school occupations, games, and stories, geometry, music and singing, physics, botany, zoology, hygiene, and the practical knowledge of the special Kindergarten occupations: such as paper-folding, stick-laying, Froëbel's drawing, paper-plaiting, laths, rings, sewing, punching, modelling, geometrical paper-folding, paper-cutting, paper-twisting, pea work, and colouring.

The whole examination need not be passed in one year; a candidate may present herself for any number of subjects or for all. The examination fee is two shillings for each subject.

To prepare for this examination, two years' training is considered absolutely indispensable, and this can be obtained at the various Kindergarten Training Colleges throughout the country.

At the one at 31, Tavistock Place, London, which was founded by the Froëbel Society, the fees for tuition are £20, or £7 a term, payable in advance; the hours of attendance are from half-past nine until half-past four, and the pupils are given work to do at home in the evenings.

The only limit of age for the students is that they must be over seventeen. During the second year of the course they are allowed to take morning engagements for three days a week; these are easily procured, and the remuneration is generally about £20 a year, just sufficient to pay the College fees.

There is one scholarship attached to the College, and the Council are very anxious to found some more, only unfortunately at present the means are wanting.

There is also an excellent Training College at 21, Stockwell Road, London, S.W., under the auspices of the British and Foreign School Society. This is superintended by Fräulein Heerwait, a most experienced teacher, who was one of the founders of the Froëbel Society, but has since withdrawn from it, and grants certificates herself to all her pupils who have gone satisfactorily through the course of training she prescribes for them. The fees are £3 15s. per term, to be paid in advance. The students practise in the Kindergarten from 9 a.m. until 12, and receive lectures and lessons on the principles of education, the Kindergarten system, &c., all the afternoon, excepting Saturday, which is a holiday; but I understand the students are given sufficient work to take home to occupy almost all their leisure hours.

Fräulein Heerwait holds a special class one evening in the week for mothers and persons engaged in teaching in the rudiments of the Kindergarten system; she charges £1 for twelve lessons.

There are families in the immediate neighbourhood of the College where students whose homes are distant are expected to live; the charge for board and lodging is twenty-five shillings a week.

A Kindergarten Fund has lately been formed to assist girls who are desirous to be trained, and whose friends are unable to meet the necessary expenses. This fund is only available for students at the Stockwell College; its assistance is always afforded in the form of a gift, and it is distinctly not a loan society, as they wish the teachers they prepare to start in life unhampered by debt.

For the aid of students at other colleges there is a most excellent society, not at all generally known: this is called the Teachers' Education Loan Society. It advances school fees upon certain conditions to persons over sixteen years of age desirous of improving their education for purposes of self-maintenance as teachers. Application for the regulations should be made by letter to the Hon. Sec., Miss Ewart, 3, Morpeth Terrace, Victoria Street, London, S.W., before February, May, and November in each year, for the three terms of Easter, Michaelmas, and Lent following.

This Society is in connection with the Women's Education Union, which has been so successful in promoting the higher education of women. Probably many girls' feelings of independence would make them more willing to avail themselves of assistance taking the form of a loan, to be repaid out of their salaries after they have obtained situations, than of a gift from strangers, more or less resembling charity.

Kindergarten teachers receive very good salaries, usually eighty pounds a year: sometimes more, but seldom less; and, greatest charm of all, are sought after, instead of being obliged to join the forlorn army of governesses that support the agency offices all over the kingdom; but they cannot expect to keep their situations as long as ordinary governesses, for when the last child is seven years old their occupation is gone, and they must be prepared to seek "fresh fields and pastures new," with, however, the comfortable certainty of easily finding them.

During the six years the Stockwell College alone has been open the authorities have received at least 300 applications for teachers, and have only been able to supply about 50; and herein lies the great danger to the Kindergarten system: that as properly qualified teachers are not forthcoming, the impostors, who are always ready to take advantage of any opportunity, may so disgust the public with the whole affair, that the taste for this method of instruction may die out, or a prejudice be created against it which may be very hard to overcome.

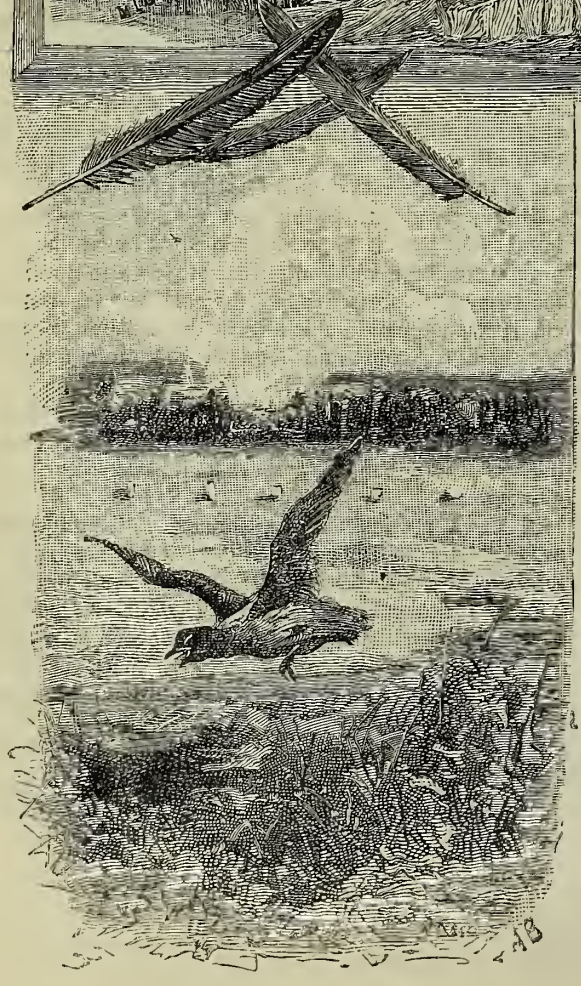
The aim of the writer of this paper will be attained if it induces any girls to adopt Kindergarten teaching as their profession. No doubt, the two years' necessary preparation is a serious obstacle, especially to those who have already commenced to earn their own living, but girls who are thinking about what they shall do will do well to turn their attention to it. Many of their parents would far rather support them for the extra two years, with the prospect of their easily obtaining situations with good salaries at the end of that time, than allow them to start at once on the precarious life of ordinary, rather inefficient governesses.

But let no girl adopt this career under the mistaken impression that it is an easy one. The truth that nothing really worth doing is easy to do can never be too strongly impressed upon them. The task of educating young children is always an arduous, though an interesting one, and requires the most untiring patience, tact, and industry. The training also is difficult, and to obtain a first-class certificate students must throw their whole hearts into their work; but the variety of subjects prevents its ever becoming monotonous.

A correct musical ear is an immense advantage, but not absolutely indispensable, as certificates are granted to candidates who pass in everything excepting music. Though they would probably find it rather difficult to obtain private situations, they might do well as assistants in schools; and as a matter of fact, very few people are so hopelessly unmusical as to be unable to learn the simple tunes required.

The necessary knowledge of drawing can also be acquired by almost any one, so the only essential qualifications are good health, an average intellect, and a determination to succeed.





"A SLAUGHTER OF DOVES."

'TWAS Hurlingham—the "Tournament of Doves!"
Young beauties in their "pride of place" were there
In charming toilettes and with perfect "loves"
Of hats and bonnets; fairest of the fair

Was one young demosel of noble birth,
Dressed in dove-coloured robe with feathers trimmed:
Around her hovered lords with high-bred mirth,
Till "Pleasure's" sparkling cup with "triumphs" brimmed.

But now the valiant tourney has begun—
Still gentler doves await the sportsman's skill;
Each gallant knight, with deadly-levelled gun,
Against all rivals tries who best can kill.

Up rise the poor scared birds and strive to soar
Above the murderous hail, but all in vain!
Killed, wounded, "only winged," score after score
Are doomed to suffer all degrees of pain.

One lovely bird of plumage soft and rare—
Soft as the lady's own—by strange mishap
With broken wing fell helpless through the air,
And stained with drops of blood the beauty's lap.

And upward looking with beseeching eyes—
Eyes whose mute eloquence told well the tale
Of terror, horror, speechless agonies—
Touched her kind heart and turned her soft cheek pale.

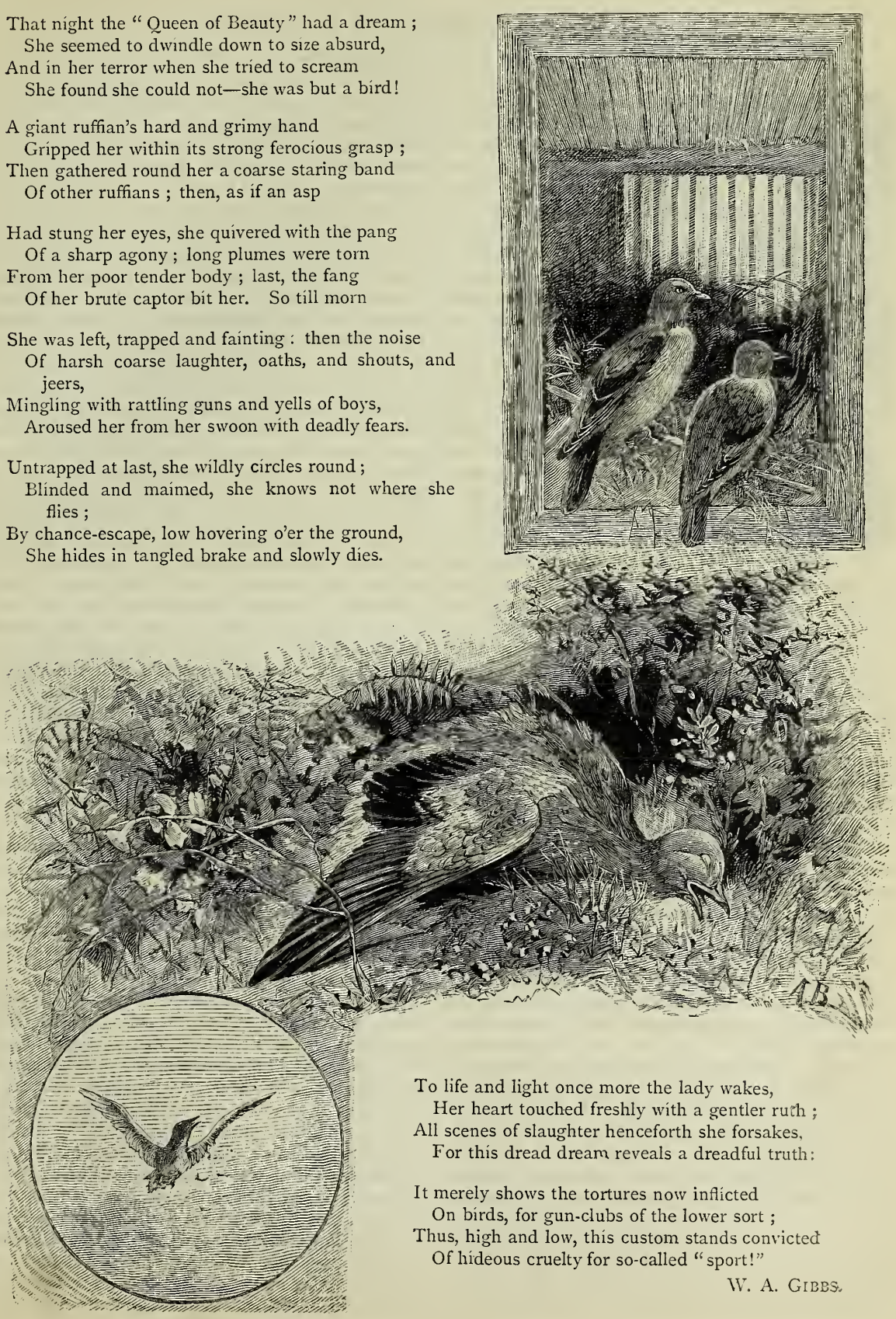
That night the "Queen of Beauty" had a dream;
She seemed to dwindle down to size absurd,
And in her terror when she tried to scream
She found she could not—she was but a bird!

A giant ruffian's hard and grimy hand
Gripped her within its strong ferocious grasp;
Then gathered round her a coarse staring band
Of other ruffians; then, as if an asp

Had stung her eyes, she quivered with the pang
Of a sharp agony; long plumes were torn
From her poor tender body; last, the fang
Of her brute captor bit her. So till morn

She was left, trapped and fainting: then the noise
Of harsh coarse laughter, oaths, and shouts, and jeers,
Mingling with rattling guns and yells of boys,
Aroused her from her swoon with deadly fears.

Untrapped at last, she wildly circles round;
Blinded and maimed, she knows not where she flies;
By chance-escape, low hovering o'er the ground,
She hides in tangled brake and slowly dies.



To life and light once more the lady wakes,
Her heart touched freshly with a gentler ruth;
All scenes of slaughter henceforth she forsakes,
For this dread dream reveals a dreadful truth:

It merely shows the tortures now inflicted
On birds, for gun-clubs of the lower sort;
Thus, high and low, this custom stands convicted
Of hideous cruelty for so-called "sport!"

W. A. Gibbs.

MEDICATED BATHS, AND HOW TO USE THEM.

BY A FAMILY DOCTOR.



ONCE fairly and completely imbued with the truth of any theory, there seems to be nothing that a man will not do in order to impress that truth upon others, and this too with an object which is at times highly laudable. When a surgeon of one of Her Majesty's ships of war stood upon the quarter-deck, and before the panic-stricken crew imbibed a portion of black vomit, to prove that the yellow fever then raging on board was not infectious nor contagious, and by that act restored confidence and saved the lives of the greater portion of the crew, the man proved himself to be a hero, and a lucky one too. Not so fortunate, however, was the physician who, during the plague in London, inoculated himself with the virus—he died.

A theorist of the right sort, Dr. Graham of the last century must have been. He flourished about a hundred years ago, and was a great believer in the efficacy of earth-baths for the cure of many disorders. He was assuredly most enthusiastic in his belief, and it is, I think, highly amusing to read of him exhibiting himself "buried in earth with only his head, duly powdered, and pig-tail above ground, and beside him also buried his goddess of health, the future Lady Hamilton."

I do not suppose that any of my readers will care to try Dr. Graham's peculiar style of bathing, nor the sand-bath either, which latter is much practised at the Mediterranean watering-places. But to such as contemplate a journey in quest of health to the spas of Germany, I might as well mention that there is a kind of bath in vogue there, highly recommended by physicians for weakly patients with feeble circulations, and such as suffer from languor and nervousness. It is called the *peat-bath*. The peat which forms the principal ingredient of this by no means inviting-looking bath, is specially prepared for the purpose; it has not only been impregnated with the mineral water of the district, but has been thoroughly exposed to the air all the winter, by which means the minerals have become oxidised. The pleasant sensations created by immersion for some little time in a bath of this kind, and the good that usually results from a course of them, amply repay the patient for the pain and difficulty he may have at first experienced, in making up his mind to adopt so curious a remedy.

The peat-bath is one that might very easily be adopted in our own country, and I have more than once heard well-known German physicians express some little surprise that it has not been so. The bath is made by mixing the peat in water of a temperature of from 80 to 100 degrees, and should be about the consistency of the thickest soup. It is not ordered to be taken every day at the spas, but alternately, day about, with the ordinary bath. I do not pretend to understand the real action or the physiological effect of the peat-bath on the system, but I have every reason to believe that it is of very great value in many chronic disorders, such as gout and rheumatism, and enlargement of the joints, as well as in congestion of the liver, with its many attendant evils. Even bathing the feet and legs in a warm bath of this kind before going to bed, will produce copious and soothing perspiration and induce sleep. Now if I deemed it impossible for any save those who travel abroad to be able to indulge in the peat-bath, I should do wrong even to mention it; but the peat-earth can be imported, properly prepared, from the German watering-places, not perhaps without some little trouble or expense, but what is this compared to the recovery of the blessings of health or the alleviation of disease? On the other hand, I see no reason to doubt that the peat-earths from our own bogs and moors may possess equal efficacy; they are, at all events, worthy of a trial.

At some places or "cures" whey is used as a bath; it is said to be very soothing to the nervous system, and to the skin as well, and in painful neuralgia.

Electrical baths are much used at the sea-side watering-places of even our own country. I do not think they can do much harm, and it is just possible they may do good.

A better bath in my opinion, and one naturally medicated, is the tepid or warm salt-water bath, not taken at home in your own room, but away down by the sea-side in some place likely to suit the constitution, say at Folkestone, Worthing, Brighton, or Eastbourne. The cases most likely to receive permanent benefit from these baths are those of debility of the nervous and muscular systems, debility from over-work and worry, or from *ennui* or excess of any kind, as well as cases of dyspepsia, and chronic rheumatism and gout. At many sea-side places you can get tickets for a course of such baths. Well, about midday you saunter leisurely along the cliff or the beach towards the bathing establishment, perhaps with a book or newspaper in hand, pausing often to look around or out to

sea, or even sitting down at times, the better to enjoy the balmy health-giving breath of the ocean, for all hurry and excitement must be avoided. Arrived at the bath-room, and the operation gone through, you dress leisurely and walk home again, and very likely before you have arrived at your rooms, you will find you have sufficient appetite to enable you to do ample justice to a well-cooked early dinner. There must not be the slightest excess in eating, however, and if you feel inclined to sleep for half an hour afterwards, do so on the couch with some light covering over you. A four or six weeks' course of baths taken thus has often worked wonders, and restored to health and good spirits those who had been ailing, peevish and unhappy, for years.

In many cases, such as those of general debility or chronic rheumatism, the salt-water bath may be used with considerable advantage in one's own room, without going from home or to the seaside. Bay salt is sold very cheaply by all grocers, and it is easily used. If the patient feels strong enough to use a cold bath before breakfast, he can add the salt to the water on the previous evening, in the proportion of a quarter of a pound to two gallons ; it will be quite dissolved before morning. It is used as a sponge bath, and it would be as well if the body were first lathered over with warm water and some mild non-perfumed soap ; plenty of rubbing with coarse towels after the bath aids the good effects of it. If, however, the cold bath is not advisable, the salt may be added to tepid water and the body well sponged therewith. I happen to know that many of my readers would use the bath every morning except for two reasons. First, they feel too delicate to use a cold bath ; and, secondly, they they have not the convenience to obtain a tepid one. Well, if a person gets up to begin the duties of the day at—we will say—seven o'clock, and the water in the kitchen boiler is hardly hot, the latter difficulty would be an insurmountable one—so far, at least, as morning is concerned ; but, on the other hand, few are so strangely positioned as to be unable to get a bath at some other period of the day. Let the time it is taken be about three hours after a meal, and safety is insured. In almost every town of any importance there are public baths, and I would like to see them more frequented than they are. The drawback is that they are too expensive for constant use ; I trust before long to see bath-rooms established on the co-operative principle. They could be got up so cheaply, they might be salt water or fresh, cold, tepid, or hot, according to taste ; or the tepid soap bath might be used, followed by the cold sponge, or the tepid bath followed by a cold shower. Bay salt is cheap, soap is cheap, and bathers could use their own towels. In the heating of the water, some would tell me, the expense would lie. Probably, but I must be pardoned for saying that it ought to do nothing of the kind. I grant you that it costs money to heat some thirty gallons of water, but who would want thirty gallons for a morning tub ? No : a bucketful of water, tepid or warm, is all that is needed, and that ought not to cost more than the fraction of a penny. If cheap baths were to be established in the various cities and towns of the United Kingdom, they would, I doubt not, be duly appreciated by the public ; and they would, I feel fully convinced, exert an influence for good on the national health.

While taking a course of baths in one's own room for the restoration of health and the bracing up of the system, in whatever way such baths may be medicated, it will be always as well to attend to the state of the digestive organs, and the general state of the constitution. Attention ought to be paid to the general principles of hygiene as regards diet, air, and exercise. A suitable aperient should be taken occasionally, a pill that will not weaken the system too much. This a patient can generally choose for himself. A tonic should likewise be taken ; if it is to improve the digestion, it ought to be composed of some of the vegetable bitters, as gentian, calumba, chamomile, or quassia, in combination with a mineral acid, either hydrochloric, nitric, or phosphoric. This any chemist can prepare. If a muscular tonic is needed, small doses of the tincture of nux vomica (from five to ten drops) three times a day, in a little water, will often do a great deal of good. If the nerves need toning, then we have an excellent remedy in the superphosphate of iron, or in iron in combination with quinine.

Delicate ladies and children often derive a large amount of benefit from the use of the iron bath, or steel bath, as it is often called. I do not imagine for a single moment that the iron is absorbed into the blood ; it is more likely that it acts by stimulating and bracing the nerves of the skin. Be this as it may, the steel bath undoubtedly increases the appetite and strengthens the system. The sulphate of iron may be used in the proportion of a quarter of an ounce to two gallons of water, tepid or cold, as a morning sponge bath.

After using this bath, or indeed any medicated morning bath, and well rubbing the body with the roughened towel, the patient should dress at once, not necessarily in a hurried manner, only he should keep moving and neither sit nor lie down again. Let him get out of doors soon thereafter, and have a breath or two of the fresh air and a turn up and down the garden before breakfast ; but a walk of any length in the morning on an empty stomach is to be deprecated, except in the case of the young and robust, and even they ought, before going out after the bath, to eat a morsel of biscuit or swallow half a glass of pure milk.

A mildly alkaline bath for morning use is often to be recommended to people who are of the lithic or gouty diathesis, or subject to attacks of chronic rheumatism. It may be composed of two ounces of carbonate of soda mixed in three gallons of tepid water ; this bath has a softening influence on the skin and is also very cleansing. It might be used alternately with a saline bath.

I have before recommended those people who are wise enough to appreciate the benefits derivable from the constant use of the bath, to invest in a small thermometer, to enable them to regulate the temperature of

the water. What is called the cold bath ranges from freezing point or a little over up to 65 deg., over that and up to 80 deg. would be a cool or temperate bath, 85 deg. would be tepid, 95 deg. warm, and about 100 deg. a hot bath.

I may here mention, parenthetically, that peat-water has been tried as a bath—temperature about 85 deg.; it is simply the brown stagnant water of our moors and mosses.

Of the *pine balsam* bath I cannot speak from personal observation, but I have it on very good authority that it is very soothing and beneficial in cases of chronic rheumatism, as well as in cases of excitable nervousness. The balsam is distilled from the tender green leaves of the pines, and the distillation is added to the warm bath, the quantity being increased daily. I do not need methinks to apologise for mentioning either of these baths, knowing from experience that long-suffering invalids are always glad to hear of anything that is even likely to do good, if they are at the same time assured that the remedy recommended cannot do harm.

People with tender skins often suffer, especially during the warm months of summer, with irritating rashes on the skin, akin to the prickly heat of tropical countries; the shoulders and arms are very commonly the seat of the annoyance. The *starch-bath* will be very soothing in such cases: to a couple of pailfuls of tepid water add about two ounces of powdered starch, previously well mixed with boiling water. The skin should be dried with a soft towel, and during the time the irritation continues, care should be taken to avoid all excess in eating or drinking, to wear the lightest of clothing consistent with warmth and comfort, to avoid exercise in the heat of the day, or anything likely to bring out perspiration, such as the drinking of hot tea or coffee; an occasional matutinal aperient will also do good.

The mustard foot-bath is supposed to be something that everybody knows all about, but why is it not more commonly used then? A bucketful of hot water is all that you want for a foot-bath, and into this is thrown a couple of ounces of the best mustard. It is then ready, and it is to be hoped that the patient who has taken it is also ready to jump into bed immediately after it. It is useful in cases of incipient colds, or headache, or sleeplessness from congestion of the head, or generally when one does not feel particularly well and would like a good night's rest. But let me warn you against the habit of taking what is called a "nightcap," after the mustard foot-bath, if you would not have the former counteract the effects of the latter.

When the skin is hot, and the patient fevered and weak, sponging the face, arms, legs, or chest with water in which vinegar has been mixed in the proportion of—vinegar, one part—water, five, is often extremely refreshing and grateful to the feelings. Bathing the hands, arms, and face alone will do good in many cases. People need not be afraid of this simple bath. I may add that toilet vinegar is better than that in common use.

As a morning tonic bath for children or weakly people generally, the *oak-bark* bath may be tried, with hopes of good results. The very name of this bath is a recommendation in itself. If you wish to try it, prepare the decoction the night before, so that you may add it to the bath in the morning. Add then a pound of bruised oak-bark to a quart of cold water and boil for half an hour. Supposing that your morning tub contains two gallons of tepid water, this quantity of decoction will do for two baths.

IN THE GLASS.



THE village of Slapton was as quiet a village as can be. There were few houses in it; and the congregation that gathered every Sunday at the parish church came chiefly from the farms that were scattered broad-cast over the surrounding country. The vicar was the Rev. Herbert Gardner, and he was the happy father of some half a dozen children, the eldest of whom, Mattie, was a charming girl of twenty. There was little society in the village, and Mattie's chief ideas of the world at large were drawn from the occasional visits she made to a relative who lived in the neighbouring county town. Still, though she was homely and unsophisticated, there was none of that affected simplicity you so often see in girls. She was a frank, fearless, outspoken girl, full of life and spirits, and never so happy as when rambling about the old Vicarage garden, picking basketfuls of roses for some sick boy or girl, and carrying with them sunshine into some darkened home. And in such works of real love and charity the last few years of her life had been mainly spent. Her father called her "his curate"—and as the living was a small one, she was the only curate he had. Mattie had been free as yet from "heart disease," though a neighbouring squire's son had made several awkward attempts at love-making; and though Mattie quite recognised the compliment he paid her, she never for a moment regarded him in any other light than as a friend, and remained herself

perfectly heart-whole. This had happened when she was eighteen, and time had gone on smoothly enough, and at twenty she was still happy in her uneventful lot.

But the smooth run of life's wheels was interrupted at last, and the wheels were jolted out of their usual track; for about this time there came to the village a young surgeon who was looking out for a good opening for practice, and had determined to settle down here. As a matter of course, he and Mattie often met in the



"THE DOCTOR'S HOUSEKEEPER WAS STANDING AT THE DOOR WITH A PAPER IN HER HAND" (*p.* 346).

houses of the poor, and although not a word of love passed between them, people began to associate their names together, and to speak of what *might* happen as a certainty.

One day when Mattie was, as usual, amongst her roses, a servant came to say that Dr. Robertson had asked for her father, and, as he was from home, for her. When she entered the room with her basket of roses on her arm, the doctor might well be excused if he wondered which was fairer—the rose in the basket, or the rose with the basket. If such thoughts passed through his mind he quickly put them aside, for he said, "I came to ask Mr. Gardner if he would step down to old Silas Jones, who is very ill with fever. They are very poor, and any help you could give them would be of more use than medicine."

"Papa is from home," she said, "and will not return till to-morrow. But I will take them some beef-tea and port, if you think that would be good for him."

"Nothing could be better," said the doctor. "But you must not go there yourself for fear of infection. I am going past the house, and will take them myself, if you will give them to me."

"No, thank you, doctor," said Miss Mattie. "I never shirk my duty nor delegate it to others, so I will take them myself."

"Anyway, let me walk with you, if you are going now, and we can talk about the case as we go."

In a few minutes the beef-tea and the wine were ready, and Mattie sallied forth with the doctor. And this was the way they talked about the case:—

"It's a beautiful day, isn't it?"

"Glorious," said Mattie.

"What has become of you in the evenings lately? I used to see you frequently, but now you are never to be seen."

"Minnie has not been well lately, so I have stayed

at home on her account. It is pleasant to know that some one misses me," she said, laughing.

"I miss you a great deal, Miss Mattie—almost as much, if not quite as much, as your own people do. This is Jones's cottage: so now let me take the things in."

"No, indeed; I shall go in myself," said Mattie.

"No, decidedly no," said the doctor. "It can never be your duty to rush into uncalled-for danger. I am *obliged* to see these people, so let me take the basket in."

From that day it began to dawn on Mattie's heart that there was one man who missed her when she was absent, and who tried to keep her out of danger. And little by little this thought grew bigger and took more root, until there came a sort of echo to it, which said, "I miss him, too. I wish he had not to risk his life by going to see fever cases." And from that day there was less cordial friendship, and there was more shy reserve in her intercourse with the doctor. And sometimes Dr. Robertson did not know what to make of it, and one evening he said—

"What have I done to vex you, Miss Mattie?"

To which she replied, "Vex me! Why, nothing, of course. Whatever made you think you had?"

"My own stupidity, I suppose," replied he. "I should be very sorry to vex you, Miss Mattie."

"Then don't talk about it, else you will," she said.

"What a lovely rose that is! Would you mind giving it me to show me you are not vexed?" said the doctor.

"There are plenty on that bush," she answered. "You can take as many as you like."

"But won't you give me that one? I am going away for a fortnight, and it will be a keepsake—if you will give it to me. Do, please."

"If you really want it, you shall have it," she said, as she took it out of her bosom and gave it to him.

And he, as he pinned it in his coat, said, "It will remind me of a rose even fairer than itself."

"For shame, doctor!" said Miss Mattie. "I will not stop to hear such gross flattery;" and away she ran towards the house.

"Shake hands first," he cried. "I am going to-morrow, early. One may get smashed up on the journey, so I should like to part friends. It is a long way to Manchester."

She gave him her hand, saying, "Good-bye, Dr. Robertson; I wish you a pleasant journey."

He had been gone about a week when, as Mattie was coming down the street (if street it could be called), the doctor's housekeeper was standing at the door with a paper in her hand. When Mattie drew near, the old woman cried out, "Laws a mussy, Miss Mattie, but do'ee just read this paper. My owd eyes binna so good as they oncest was;" and the old lady held out a crumpled newspaper.

And Mattie read: "On the 24th inst., at the parish church, Manchester, James Robertson, M.D., only son of Peter Robertson, M.R.C.S. and L.S.A., of Manchester, to Sarah Elizabeth, daughter of the late Isaac Jefferson, of Bolton."

For a moment Mattie was speechless with mingled feelings. Then came the reflection that this garrulous old woman must not see her pain. And summoning up all her resolution, she said, "If you write to him, wish him much happiness for me."

In the solitude of her chamber, she looked into her heart, and learned her secret. This man, who was another's husband, had made himself dearer to her than any one on earth could be; and she had been mistaken in supposing that he cared for her. Oh, shame, shame, to love where she was not loved—to give her heart unasked! Still, she had never told her love—the secret was her own, and she could keep it inviolate, and meet him on his return without flinching. And although she had no power to put him out of her heart, she could and would prevent her mind from dwelling upon him.

One morning she heard that the doctor had come home. She was standing amongst her roses with a very sad heart, when she saw Dr. Robertson passing up the road with a lady. He lifted his hat to her, and she tried to return his salutation as she would that of any other friend, but somehow the warm blood came to her cheeks, and it was but a stiff and unfriendly little bow that she gave him. And while she stood thinking of it all, and wondering why she should be so unhappy, she heard footsteps behind her on the gravel walk, and turning, saw Dr. Robertson advancing eagerly to greet her. Again the crimson tide flooded her face, making her look very lovely in her confusion. But she managed to stammer out something about "glad to see you," when the doctor broke in with, "Not half so glad as I am to see you. I have been to a wedding since I left Slapton, and enjoyed my holiday immensely."

"Yes, I know," she said; "I saw your wife walking with you this morning."

"Did you, indeed?" he said, while a smile of quiet joy lit up his face. "And where were you looking when you saw her—in the glass?"

She looked up at him quickly, then her eyes dropped before the expression of his, and again the tell-tale blush overspread face and neck.

"Where did you see my wife, Mattie?"

"In the road," said Mattie.

"No, that was my sister," he replied.

"In the newspaper," she urged.

"That was my cousin," he explained. "Come here. Did you look in the glass this morning?"

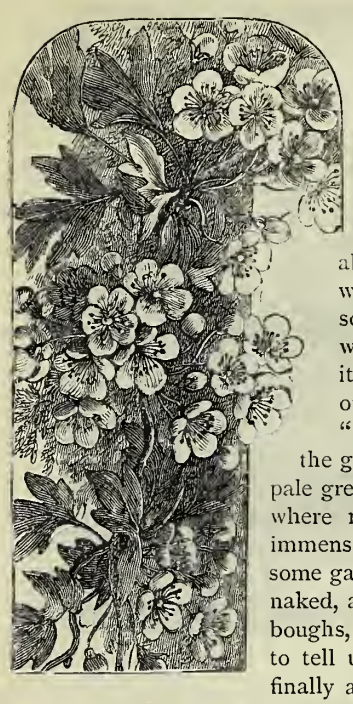
"Yes," whispered Mattie.

"Then that's where you saw my wife—if you saw her anywhere."

And, of course, that settled it; and you all know what happened as well as I can tell you.

J. H.

GARDENING IN MAY.

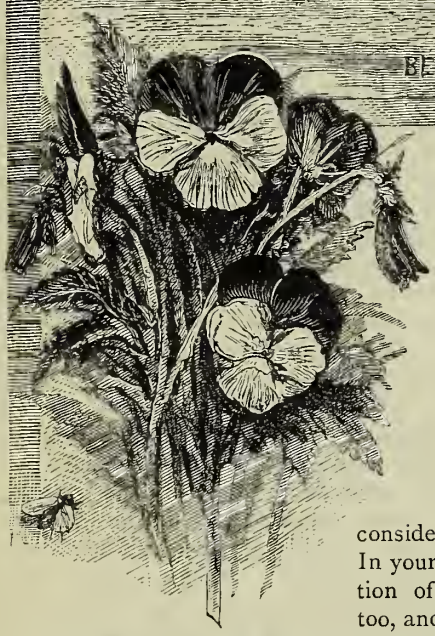


THE month of May has come round once again, and we hail its arrival with all the welcome that those who are lovers of the garden are able to give. And yet we always look upon it somewhat askance; for we feel obliged to call it the "gay deceiver" of the twelve months. "Gay" indeed it is, for the great bursting mass of pale green foliage that everywhere meets the eye is an immense relief after the wearisome gaze at the dark, gaunt, naked, and apparently lifeless boughs, that seemed almost to tell us that they had been finally and for ever deprived of re-animation, after the desperate and protracted struggle they had been carrying on with the winter frosts and snow. Our apple and pear-trees, too, that are barely out of blossom; our plums and cherries, musical with the ceaseless hum of their busy occupants the bees; our strawberry-beds, all bridal in their white and green, not to speak of the irrepressible bird-chorus that is going on day and night, all unite in adding brilliancy and effect to the gayness of the scene around. And yet with it all May is the "deceiver;" for how often when the May pageant is at its brightest the east wind blast hurries away half our hopes for the coming summer at one fell swoop! But our work this month, as it always is as soon certainly as we have left February behind us, is simply overwhelming. Let us see then what is most deserving, or what first of all claims our attention, paying always our chief attention to those branches of horticulture in which we think we failed at this time last year.

And as we spoke last month a good deal about the practice and method of grafting, it may be as well if we take a stroll round the fruit-garden to see how our young grafts are getting on, and then to give a few hints respecting their future management. Examine the trees, then, carefully, and remove all growths from the stocks—just in the same way, in fact, as we remove them from our rose stocks—and rub off all those young-rhubarb-coloured pink shoots that persist in making their appearance so often along the stock below our buds. And then, again, the clay or grafting-wax that we put round our graft, should we find it falling off or showing signs of cracking and crumbling away, must be renewed. But yet if, on careful observation, we find that the union between the stock and the graft is thoroughly established, we need not perhaps be very anxious about renewing the clay. Avoid too much handling and pulling about your young grafts. At most their junction with the stock is of recent date, and it cannot under any circumstances be of any great strength, so do not let curiosity or anxiety tempt you to the incessant test of impatient fingering. Or it may be—and this is still more likely in the weather exposure—that the bass matting has become rotten or broken. Do not remove it, but simply tie a fresh piece over the decayed matting. But take particular care about those suckers from the *root* of your stock, as well as about those little shoots along the stock itself of which we have just spoken. Roses, indeed—for although we are in the fruit-garden these remarks apply equally to them—have been known to fail entirely from neglect during this growing month to remove the *root*-suckers. This applies more particularly to grafts or budded stocks made last season or early in this. The young stock is full of energy and vitality, so that a sucker of two or three days' vigorous growth has the power completely to endanger the very existence of your young bud or graft even where a decided and thorough junction has been effected, since it has been suddenly deprived of all nourishment. Like the roses, too, most grafts require the support of a good strong stake.

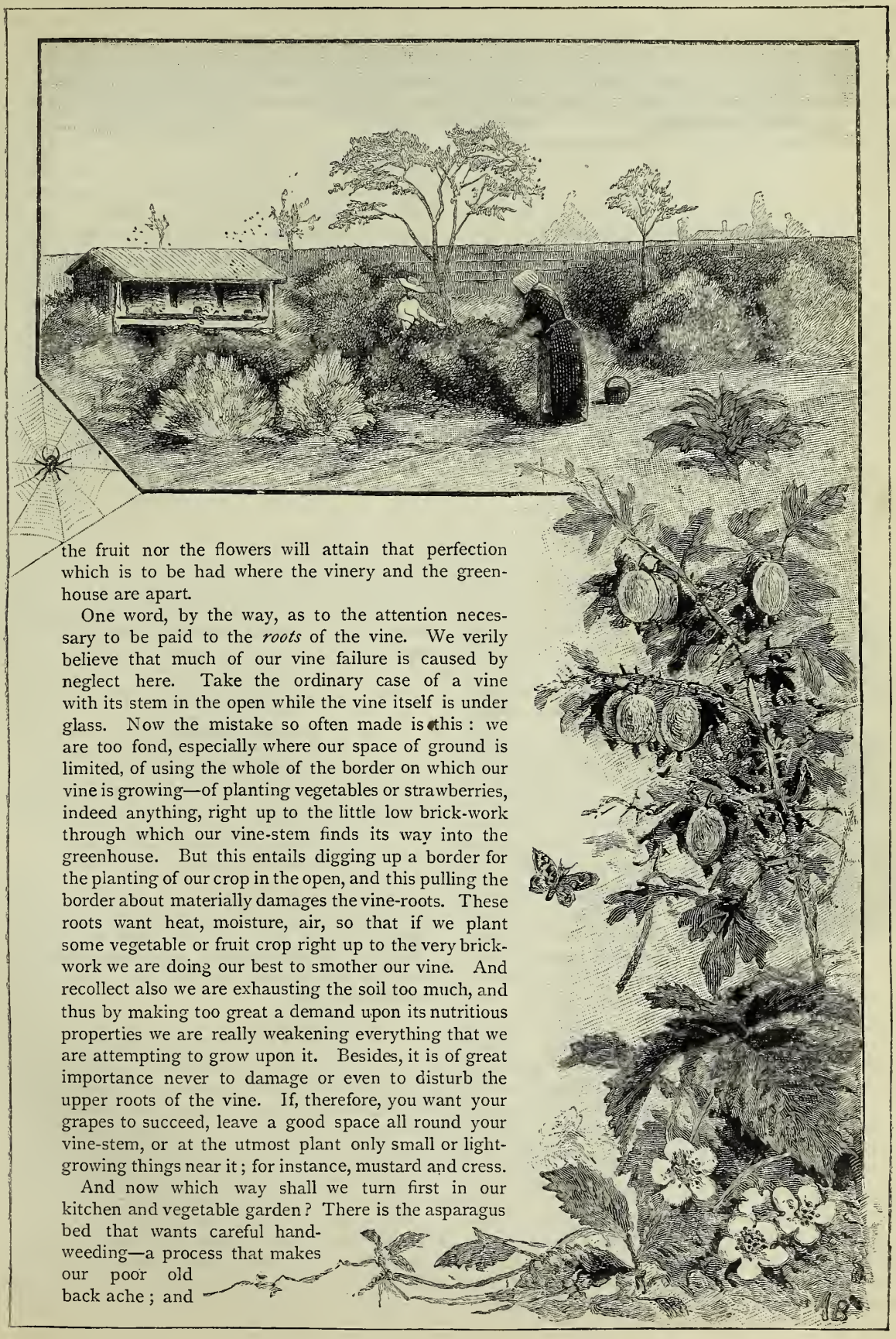
From the wall-fruit-trees, also, rub off or remove carefully with the knife any young shoots and buds which by their growth and situation you see at once will be useless to you; those shoots, in fact, which seem determined to grow perpendicularly, as it were, from the wall, and which it is therefore impossible for you to utilise. Or even where the shoots are striking out in a proper situation, if they are more numerous than you want, remove the weakest or most worthless of them. Nothing looks so well on the wall as a well-trained tree; nothing so unsightly as a carelessly grown and neglected one. Indeed, perhaps our general advice for the whole garden routine this month is this: Restrain and keep back the ardent overgrowth. The principle holds true in nearly every phase of life, animal as well as vegetable, with horses and puppies, and children as well. "That boy has got beyond all control;" "you have let him run wild," &c.—how often do we hear this unhappy nursery reproach! And so it is in the garden. There are those strawberries, for example. If those long, green, young walking-sticks, which make our strawberry plants very much resemble a vegetable daddy-long-legs, if those long shoots, commonly called "runners," are not carefully removed, your fruit will by-and-by be poor and thin. Much of it will fail altogether, for the blossom as it fades will "go blind," as gardeners say, and much of your past toil and care will prove of no avail. Our grape-vines, again, afford us perhaps the most pointed illustration of the importance of what we have been saying relative to the removal and check of overgrowth that it is possible to imagine. Their growth this month in our little greenhouse is simply marvellous.





Each morning that you look round you will find *some* change. Leave home if only for a week during this month, and you will then discover the enormous growth of the vines upon your return. Young shoots keep making their appearance endlessly: pinch off all that you do not intend to perfect themselves. Never allow three or four bunches of grapes to start in immediate proximity to one another. When your vine is in flower keep your house shut more frequently. Of course, some air must be admitted during the best of the day. Your vine, too, you will always find brittle, so in the opening and shutting of your lights use considerable care. In your manipulation of the vine, too, and in the removal of shoots, be careful not to knock or break off young surrounding branches and shoots with your awkward elbow-ends. All this may sound very homely and very commonplace, but it is nevertheless very practical; for who has not experienced mishaps of this kind when clambering up the greenhouse stand, by bringing the hat, or the skull, or some part of the human frame into provoking collision with the vine, or by sending some unhappy flower-pot on the top row bowling violently down among its fellows, and acting like a very death-dealing bombshell among the ranks of our floral display? These observations, however, are certainly revealing our poverty, for they are a proof that we are attempting the growth of grapes and flowers under the same glass canopy. It *can* be done, but, of course, neither





the fruit nor the flowers will attain that perfection which is to be had where the vinery and the greenhouse are apart.

One word, by the way, as to the attention necessary to be paid to the *roots* of the vine. We verily believe that much of our vine failure is caused by neglect here. Take the ordinary case of a vine with its stem in the open while the vine itself is under glass. Now the mistake so often made is this: we are too fond, especially where our space of ground is limited, of using the whole of the border on which our vine is growing—of planting vegetables or strawberries, indeed anything, right up to the little low brick-work through which our vine-stem finds its way into the greenhouse. But this entails digging up a border for the planting of our crop in the open, and this pulling the border about materially damages the vine-roots. These roots want heat, moisture, air, so that if we plant some vegetable or fruit crop right up to the very brick-work we are doing our best to smother our vine. And recollect also we are exhausting the soil too much, and thus by making too great a demand upon its nutritious properties we are really weakening everything that we are attempting to grow upon it. Besides, it is of great importance never to damage or even to disturb the upper roots of the vine. If, therefore, you want your grapes to succeed, leave a good space all round your vine-stem, or at the utmost plant only small or light-growing things near it; for instance, mustard and cress.

And now which way shall we turn first in our kitchen and vegetable garden? There is the asparagus bed that wants careful hand-weeding—a process that makes our poor old back ache; and

that asparagus, too, should not be pulled until the heads have grown quite three inches out of the ground. This is the practice, or at least it should be, in private, though not perhaps in market gardens. A head of asparagus that has not been removed until it has attained the height of three inches in the daylight, is a more economical one than that whose top we can do little more than suck when we sit down to table. But this latter alternative is the penalty for pulling it too early, or when its head has only just appeared above the ground. Probably when so pulled it will keep longer, but when we are gardening at home we pull it in order to cook and eat it; yes, and to eat a good half of each stalk too, and not merely to suck the end like a young gentleman fresh from his last term at school would perhaps similarly serve the agate end of his walking-stick.

But we must never forget that this is our first month of the year in which we generally attempt a real floral display in the open and hitherto almost deserted flower-beds. Yet we have always advocated a compromise between the modern bedding-out system and the old-fashioned flower-garden, in which little else but perennials and a few flowers raised from seed in the month of April and in the open were to be had. This latter is undeniably the most economical, the most natural, the least artificial, and the least troublesome system of gardening. Still, we take a great delight in supplementing it, at all events, by our stock of bedding-out plants from our greenhouse or from our pits and frames. But, first of all, take notice of those dear old-fashioned pansies, that ought now to be in their perfection of bloom, and mark any that are finer than the rest to save for seeds. Pick these flowers occasionally, as by so doing you strengthen your plant and prolong its blooming power. Some of us vary in our predilection for plucking flowers, in which, while some are stingy, others are generous, preferring to have them on the table or in the drawing-room for general display. As a rule, this last is the most advantageous, for of necessity you keep throwing the strength into the rest of the plant by pulling the flowers.

BEES AND THEIR FOLK-LORE.



FROM the very earliest times the bee has been the subject of special interest, being supposed to possess a certain amount of understanding or instinct unshared by the rest of the animal world. Indeed, it appears that our forefathers placed this favoured little being in the scale of creation immediately after man, attributing to it a portion of the "divine mind." Hence a degree of deference has generally been paid to it, which would scarcely be offered to beings endowed with only ordinary instinct. The ancients also believed that there existed a mysterious connection between bees and human souls; and there are various legends on record in which the soul is represented as issuing from the body in the form of a bee. As might be expected, therefore, numerous superstitions have clustered round this highly useful insect, and in many a country place it is regarded almost with feelings of veneration. This can only be accounted for on the supposition that through its extraordinary instinct it is able to take cognisance of things which otherwise it could not do. In the present paper, then, it is proposed to give a brief outline of the extensive folk-lore associated with the bee, showing in how many ways it has given rise to superstitious fancies and curious customs.

In allusion to their swarming we find various odd ideas, some of which may be traced back to a remote period. Thus a popular proverb reminds us of the relative value of a swarm in different months:—

"A swarm of bees in May
Is worth a load of hay;
A swarm of bees in June
Is worth a silver spoon;
A swarm of bees in July
Is not worth a butterfly."

And old Tusser, in his "Five Hundred Points of Good Husbandry," says:—

"Take heed to thy bees that are ready to swarm;
The loss thereof is a crown's worth of harm."

In Sussex, it is considered as a sign of a death in a family if bees in the act of swarming make choice of a dead hedge-stake for their settling-place. A similar superstition prevails in Norfolk, should they swarm on rotten wood, or a dead tree—a notion thus alluded to by Gay:—

'Swarmed on a rotten stick, the bees I spied,
Which erst I saw when Goody Dobson died."

In many places it is considered especially lucky when a strange swarm settles in one's garden, such a circumstance being thought to foretell either wealth or prosperity of some kind. In Suffolk, however, it is regarded just as unlucky, and the following occurrence is a curious illustration of the alarm which this piece of superstition occasionally produces:—

"Going to my father's house," says the writer, "I found the household in a state of excitement, as a stray swarm of bees had settled on the pump. A hive had been procured, and the coachman and I hived them securely. After this had been done, I was saying that they might think themselves fortunate in getting a

hive of bees so cheap; but I found that this was not agreed to by all, for one man employed about the premises looked very grave and shook his head. On my asking him what was the matter, he told me in a solemn tone that people *did* say that if a swarm of bees came to a house, and were not claimed by their owner, there would be a death in the family within the year. As it turned out, there was a death in my house, though not in my father's, about seven months afterwards, and I have no doubt but that this was taken as a fulfilment of the portent."

In the "Report of the Devonshire Association" (1876, viii. 51) the following anecdote is related as having happened in the neighbourhood of North Bovey:—

"'All of 'em dead, sir—all the thirteen. What a pity it is!'

"'What's a pity, Mrs. ——? Who's dead?'

"'The bees, to be sure, sir. Mrs. Blank, when she buried her husband, forgot to give the bees a bit of mourning, and now, sir, all the bees be dead, though the hives be pretty nigh full of honey. What a pity 'tis folks will be so forgetful!'

"Mrs. —— continued to explain that whenever the owner or part-owner of a hive died, it was requisite to place little bits of black stuff on the hive; otherwise the bees would follow the example of their owner.

"Mrs. ——'s husband, who listened while this scrap of folk-lore was being communicated by his wife, now added—

"'My wife, sir, be always talking a lot of nonsense, sir; but this about the bees is true, for I've see'd it myself.'"

This custom of putting the hives in mourning is very common, and is strictly adhered to, from an apprehension of its omission being attended with fatal consequences. At Cherry-Burton, on a death in the family, a scarf of black crape is applied to each hive on the occasion of the funeral, and pounded funeral biscuit soaked in wine is placed at the entrance to the hive.

"A neighbour of mine," says a writer, "bought a hive of bees at an auction of the goods of a farmer who had recently died. The bees seemed very sickly, and not likely to thrive, when my neighbour's servant bethought him that they had never been put in mourning for their late master. On this he got a piece of crape and tied it to a stick, which he fastened to the hive. After this the bees recovered, and when I saw them they were in a very flourishing state—a result which was unhesitatingly attributed to their having been put in mourning."

A curious superstitious custom formerly prevailed in Devonshire of turning round the bee-hives that belonged to the deceased—if he had any—at the moment the corpse was carried out of the house. Some years ago, at the funeral of a rich old farmer, a painful circumstance occurred. Just as the corpse was placed in the hearse, and the visitors (a large number) were arranged in order for the procession of the funeral, a person called out, "Turn the bees!" A servant who had no knowledge of such a custom, instead of turning the hives round, lifted them up, and then laid them down on their sides. The bees, thus suddenly invaded, instantly attacked and fastened on the visitors. It was in vain they tried to escape, for the bees precipitately followed, and left their stings as marks of their indignation. A general confusion took place, and it was some time before the friends of the deceased could be rallied together to proceed to the interment.

Another writer says an old blacksmith in Cheshire lamented to him the ill-success that had attended his bee-keeping ever since the death of his wife, which he attributed to his having neglected to turn the hives round when that event happened!

In Germany the same superstitious fancies prevail, for not only is the sad message given to every bee-hive in the garden and every beast in the stall, but every sack of corn must be touched and everything in the house shaken, that they may know the master is gone.

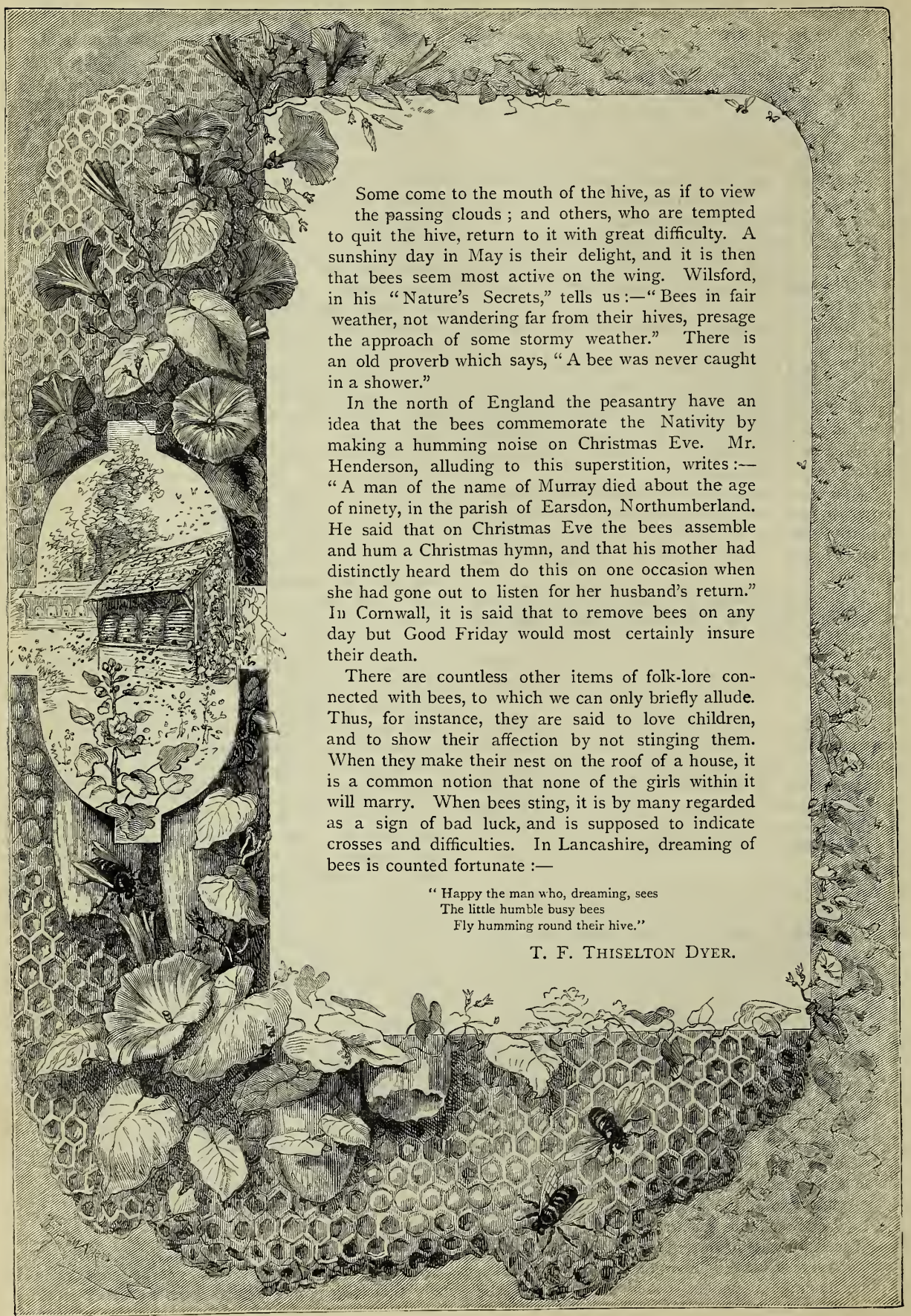
Again, in some localities bees are invited to funerals, and a formal invitation is even sent to them. At Bradfield, a primitive little village on the edge of the moors, in the parish of Ecclesfield, this custom has been kept up from time immemorial. Among other superstitions relating to a sympathy between bees and their owners, there is a popular belief in Cumberland that when the former die their owner will soon do likewise. There is also a vulgar notion that when bees remove or go away from their hives, the owner of them will soon die. In Northamptonshire the entrance of the wild or humble bee into a house is deemed a certain sign of death; and a Welsh belief informs us that a short time previous to the death of the owner of bees, the bees themselves will die without any apparent cause.

Death, however, is not the only event in human life communicated to bees—that more joyous one, marriage, being also announced to them. Thus, in many country places it is said that not only do bees expect to be informed of every wedding, but to have their hives decorated with a wedding-festoon. In Lincolnshire it is even customary to present a piece of wedding-cake to the bees, for fear of their becoming irate and stinging every one within their reach. The same practice exists on the Continent; and in Lower Brittany, whenever a marriage takes place, the bee-hives are adorned with a piece of red cloth. It is believed that if the bees are not allowed to participate in the feelings of the family on such an occasion, they will take offence and desert the place.

There is, too, a great deal of weather-lore associated with bees. Thus, when many enter a hive and none leave it, rain is at hand. Hence the rhyme:—

> "If bees stay at home,
> Rain will soon come;
> If they fly away,
> Fine will be the day."

Nothing, it has been remarked, can be more melancholy than the appearance of bees in wet weather.



Some come to the mouth of the hive, as if to view the passing clouds; and others, who are tempted to quit the hive, return to it with great difficulty. A sunshiny day in May is their delight, and it is then that bees seem most active on the wing. Wilsford, in his "Nature's Secrets," tells us:—"Bees in fair weather, not wandering far from their hives, presage the approach of some stormy weather." There is an old proverb which says, "A bee was never caught in a shower."

In the north of England the peasantry have an idea that the bees commemorate the Nativity by making a humming noise on Christmas Eve. Mr. Henderson, alluding to this superstition, writes:—"A man of the name of Murray died about the age of ninety, in the parish of Earsdon, Northumberland. He said that on Christmas Eve the bees assemble and hum a Christmas hymn, and that his mother had distinctly heard them do this on one occasion when she had gone out to listen for her husband's return." In Cornwall, it is said that to remove bees on any day but Good Friday would most certainly insure their death.

There are countless other items of folk-lore connected with bees, to which we can only briefly allude. Thus, for instance, they are said to love children, and to show their affection by not stinging them. When they make their nest on the roof of a house, it is a common notion that none of the girls within it will marry. When bees sting, it is by many regarded as a sign of bad luck, and is supposed to indicate crosses and difficulties. In Lancashire, dreaming of bees is counted fortunate:—

"Happy the man who, dreaming, sees
The little humble busy bees
Fly humming round their hive."

T. F. THISELTON DYER.

THE TROUBLE IT BROUGHT.

By C. DESPARD, Author of "The Artist and the Man," "When the Tide was High," &c.

CHAPTER THE THIRTEENTH.



"IT was awful!" said Nina, when I had succeeded in soothing her a little. "Oh, yes; it was awful! If it had not been for Horace, I should not be here to-night; but he killed the savage dog that was springing upon me, and he spoke and then the men slunk away. But it was dreadful to meet their looks! What have I done that they should hate me so?"

I answered that they were ignorant and suspicious. I could not help saying also, for I was annoyed with her for giving us all so much trouble and vexation, that it was partly her own fault; she had received sufficient warning. "Papa begged you not to go to the Old House, Nina," I said. "You should either have obeyed him or have given him a reason for your disobedience."

She answered in a voice so low and heart-broken that I felt sorry for having reproached her. "If you only knew how hard it is, Mary, you would not blame me: you would be sorry. It is just like a heavy burden; sometimes I feel as if I could bear it no longer; sometimes I wish for anything to happen—anything—that would change this dreadful state of things. It has been in my heart a hundred times to go to Uncle Richard and tell him everything. For I love him, I trust him—and it would be such a relief!"

She was like one choking for air. She was intensely excited. She walked to and fro in the room, sobbing and throwing her arms about. "And I cannot," she said—"I may not."

"But why, Nina, why?" I pleaded.

She cried out, "For pity's sake do not tempt me!"

She was silent again for a few moments, then she sank into a chair, and her voice, which excitement had made shrill, dropped to the low, spiritless moan of one who is slowly surrendering hope. "I love you all, Mary. You received me as a sister into your home, and it is a happy home. You received me, and I disturb your lives. I make you unhappy. Oh, yes, I know all this, and when I think of it, it enters into me like a knife! But there is something that should be dearer to us than friends or a happy home, or even that dreadful fear of seeming ungrateful, which is worse to me than all—something dearer."

She spoke slowly; her eyes were strangely fixed, as if she saw before her a picture or vision. I thought her mind was wandering, and I would not speak even the inquiry that trembled on my lips, so did I fear to disturb her train of thought, and prevent the confidence which seemed impending.

But, to my great disappointment, she went off suddenly on another tack. "Mary," she said, "do you know what it is to see the picture of the future before you—days upon days—days upon days—with nothing but sadness to relieve them—to see it, and yet to go forward to meet it resolutely, because it is your duty? No; of course you do not. I am absurd to ask you: your duties are happy."

The tears filled my eyes and rolled down my cheeks while she rambled on in the same tone, as of sorrow that had scarcely the spirit to utter its moan. "There is an old parable somewhere of a sparrow flying through a lighted hall, out of the darkness and into the darkness. I feel like that sparrow to-night; and this is the lighted hall." She looked all round her wistfully. There was so pathetic a sadness in her face that I could not speak. "Why are you crying, Mary?" she said, and after that she complained of her eyes being heavy, and said she would like to rest. So I helped her to bed, and sat near her for the principal part of the night. Even when at last she seemed quietly asleep, I would not leave her room. After what had passed I was afraid to lose her from my sight, and I lay down, half undressed, on the sofa in her room. I tried to persuade her to keep her bed on the following day, for she looked fragile and worn; the fright had evidently told upon her; there was a hunted look in her face, which alarmed me, and her eyes were encircled with heavy rings. Besides, I was afraid that the painful occurrence of the preceding night might have already reached my brothers' ears, and I feared the effect upon Nina of any disagreeable scene. But since she insisted upon joining us, I decided to precede her, and let my father and brothers know, incidentally, that she was not very well.

My announcement was met with concerned looks. My dear father urged me to send for a doctor at once; Henry and James attributed the indisposition to our exposure on the night of the storm. I breathed more freely, for it seemed certain that the events of the evening before were not yet known.

Nothing out of the ordinary course of things happened at breakfast. Even James—struck, I suppose, by Nina's appearance—was more amiable and far less dictatorial than usual. But the evil hour, as I felt certain, was only put off, and more earnestly than tongue can tell did I long through the dreary hours of that heavy day for my brother Eugene, and my kind old music-master. The weather was sultry; it was like

a repetition of the afternoon before the storm. Nina and I passed it together. If I knew she was out of my sight for a moment I felt uneasy, and she was much more tolerant than usual of the watchfulness which I was too anxious to hide. Indeed, there was something in her manner that day which oppressed me. The pain that haunts last times and parting hours I read, or fancied I read, in the look, full of speechless tenderness, which now and then I caught fixed on my face; there was also a subdued sadness in her voice, and a gentle submissiveness in all her actions. She forgot everything at times, and seemed to be moving about mechanically, like one in a dream. As I watched her at such moments, an awful fear arose within me. What if my darling were not in her right mind? What if she was acting under the compelling power of an overmastering illusion? Stranger things had happened. But it would be terrible—terrible—to lose her in this way.

My fear did not last long. It was very soon evident to me that a reality, and no illusion, had been the cause of Nina's strange conduct.

While we sat in the summer-house that afternoon—it was Friday, I remember, the evening for service at the church—James passed us. He was walking with a rapid stride, and passion had darkened his face. I would not stir, but I took Nina's hand in mine and held it tightly. We heard James ask the gardener, whom he met in the avenue, if the young ladies were indoors or in the garden. He was directed to the summer-house, and presently, with no smile on his face, he stood in the entrance.

He spoke quietly, but I could see he was under the influence of strong self-restraint. "Will you come in, both of you?" he said.

I asked if it was time for my father's tea.

He repeated his request in the same tone. I do not like to be commanded by my elder brothers.

I said, "We shall come in presently, at our own time" and prevented Nina from rising.

Then James's passion rose. "You are acting absurdly," he said, "as you have acted from the beginning. So long as you can gratify your self-will and preserve your infatuation, it is nothing to you. I suppose that the whole village is up in arms, and that our names are bandied about from mouth to mouth. It is nothing to you that our father——"

I interrupted him. "James, you are unjust and cruel. I will go to our father. Nina, darling, come with me. You are not afraid?"

No; she was not at all afraid. Though pale, she was perfectly calm, and there was in her attitude a new and most touching dignity. Had James not allowed himself to be overcome by anger, he must have seen this. Our darling was no guilty being, shuddering before the horrors of discovery. She was a noble woman, conscious of rectitude, who, knowing herself at the crisis of her fate, had mustered up all her force to meet worthily whatever fate might have in store for her.

James said, "That is precisely what I wished. It is right that our father should know how his wishes have been disobeyed, and how he has been deceived and slighted, all under the mask of affection."

"James!" I cried out indignantly.

"It is true," he answered.

Nina turned her white, still face, and put her hand on his arm. "Cousin James," she said, "wait a little."

I do not wonder that he was silent. If ever a pure heart and a lovely soul looked out of a human face, it was at that moment.

Henry joined us in the hall. He was as much taken aback as James had been by the story of the riot in the village, but, as his nature was, he took things far more quietly. "I have spoken to my father," he said; "he expects us."

I pleaded with them to wait till later. "Papa has to conduct the service to-night," I said; "this will make him unfit for work."

I saw in my dear Nina's face that the thought of annoying him was torture to her. But, for fear they should misconstrue her, I would not let her speak.

"You would like to wait till after dark, to have another disturbance in the village," said James.

"Nina, dear," I addressed her, "promise that you will stay with me to-night."

"I will promise nothing," she answered.

"It will be the shortest plan to go to the study at once," said Henry; and presently we were all in my father's little room, his keen eye—I never knew till then how keen and judicial it could be—looking from face to face. I think he saw what I had already seen, for when his eye rested upon Nina a deep tenderness succeeded the keen expression in his face.

"Sit down, dear child," he said to her gently, and, putting his arm round me, he drew me to his side. "Now, my sons," he went on, "tell me what has happened."

James gave an account of the scene of the preceding night. Several of the villagers, he asserted, had identified the ghostly visitor to the Old House with Nina; it was given out that she was a witch, who could be in two or three places at the same time; stories of the most absurd and sensational character were being spread abroad about the family; if something were not done, and done promptly, the place would soon be too hot to hold us. To this Harry added a few weighty words. He said that people in their senses did not act without motive. Either their own cousin was irresponsible—and, in that case, the sooner she was put under constraint of some kind the better—or else she had some strong motive for her obstinacy, and was keeping us all in the dark. Appealing to her, he urged her to be perfectly frank with us. "We can only wish you well, Nina," he said. "It is foolish of you to mistrust us."

"Foolish!" cried James, "say ungrateful and wicked, and you will be nearer the mark."

My father's deep voice imposed silence. He turned to where Nina sat, pale and calm, with drooped eyelids, before him.

"Is it true, dear child?" he said. "Have you disregarded my wish, or is this a foolish story got up

by superstitious people? Speak without fear. Whatever you say will be believed."

She turned still paler, and her lips moved, but no sound came.

"Look up," said my father, very gently.

She raised her eyes, and I turned away groaning. Were these eyes—so weary and sad—so wild with the hunger for rest—the very eyes of my cousin? I whispered to my father to be tender with her.

He repeated his question. "Nina, my dear child, I must ask you. Tell me, is this that they say of you true?"

She answered very low, "Yes, Uncle Richard, it is true."

"You have been to the Old House constantly, in spite of what I said to you?"

"Yes."

"Then you have a reason for going there?"

"I have a reason."

"Give me your reason, Nina."

"I cannot."

"You hear!" said James. Henry began to use reasonable argument. "It is not possible," he said, "that you can preserve your secret long. It will be better for you to give it up at once."

She did not answer. She kept her eyes upon my father's face, as if she were waiting for his sentence. He looked distressed and harassed.

"Leave your cousin to me," he said presently, and Henry and James left the room. We three were alone together.

My father held out both his hands. "Now, my poor child, what is it all about?" To my sorrow and indignation she shrank back. He urged her in words so tender and powerful that they went to my very heart, but she continued mute and irresponsive. Meantime the evening was drawing on. I looked at the clock; it was time my father should be on his way to the church.

I made one passionate appeal to Nina. For his sake I entreated her to yield. "Don't let him go away sad and unhappy, Nina," I said. "He loves you. Tell him the worst. He will not judge you harshly."

But she continued to answer as before, "I cannot, I cannot!"

My pity was nearly lost in my anger. "But at least you will remain at home to-night?" I said. She did not answer.

"Do you hear, Nina?"

"Yes, I hear."

"And what do you intend to do?"

"I have no intention."

My father interposed. "It will be better, perhaps, for you to go to your own room, Nina. Think, dear child; I will think too. Heaven, it may be, will send us both good inspiration. To-morrow morning I will see you again."

He was disturbed rather than vexed, sad rather than angry. With a stately courtesy that was peculiar to him, he led her to the door of his room, and as she raised her eyes to wish him good night he kissed her on the brow. It might have been quite an ordinary occasion. To me he said, after she had gone out, "Take my advice, and leave your cousin to herself for a short time, Mary. See if she wants anything later, and take it to her. I will look into the thing further to-morrow."

I lingered, for my heart felt sore, and he spoke a few kind, consolatory words. He told me that, in spite of everything, he believed in Nina still. There was some mistake, some mystery, but before another sun set it was his hope that the mistake would be rectified and the mystery solved. In the meantime, I must be courageous and confident.

I tried to follow my father's advice. I met my brothers with a calm face at the dinner-table, where our Nina was not, and I made an effort to talk with them quietly on indifferent matters; but it was a relief after dinner to slip away and, believing it was now late enough, to stand at the door of Nina's room and ask her to let me come in with her supper.

To my sorrow no answer came. I tried the door: it was locked. I could hear her, I believed, moving about quickly, but no entreaties, no terms of warmest endearment, would induce her to come to the door and let me in.

I went away sadly, and came again after an hour had gone by, but the result was the same. The movement had ceased now, and there was a stillness in the room that alarmed me; but when I mentioned this to my brothers, they said that Nina had probably fallen asleep, and both of them hoped sincerely that sleep would bring her good counsel.

I retired to my chamber that night and got up the next morning with the uncomfortable feelings of one over whom some evil of unknown magnitude is impending.

And, naturally, the morning brought surprises. I did not get up so early as usual. James was before me. When I went out into the garden he came to meet me. I was offended with him, and would have passed him by with a curt good morning, but he called out to me to stop.

"I have something for you," he said. He put his hand in one of his pockets and drew out a key. "You had better see how Nina is this morning. Here is the key of her room."

"The key of Nina's room?"

"Yes, the key of Nina's room; don't you understand plain English? I told you some time ago that if she had a strong will, so had I. I took my own means of keeping her quiet yesterday evening. What *are* you staring at, Mary? Here, take the key—it won't bite you."

"You mean to tell me that you locked Nina into her room last night!" I cried.

"That, and nothing else. It was immediately after she went up from the study. No doubt she thought our father did it."

My indignation found a voice at last, and I asked him how he dared to take such a responsibility upon himself. He laughed, and said he was ready to bear all the consequences of his action. Our father, he



"THERE WAS AN OLD TERRACE IN FRONT OF THE HOUSE; WE WENT UP THE STEPS WHICH LED TO IT" (*p.* 358).

protested, was far too kind, and the little witch had fascinated him as she did everybody else, with the sole exception of himself. "Why," he went on, "even Henry, sensible and experienced as he is, begins to speak about being careful, and the rest."

I must not put down the bitter words with which I answered James. He would say, no doubt, that I thoroughly lost my temper. The real fact is, I was frightened and sick at heart. I had before me, with the distinctness of an awful vision, the conception of my Nina's state of mind when the key was turned upon her and she found herself a prisoner; for I knew her as none of them did. Her high spirit, her wilfulness, her sensitive nature, her love of freedom, her tendency to rebel against anything like coercion, were all well known to me, who had been her friend and confidant. I had always said that where one loving word could control her a single tyrannical act would drive her to desperation.

And the tyrannical act had been committed: the high-spirited girl had been braved. What would the consequences be?

When I had railed fruitlessly against James I ran up-stairs, and, with a hand that trembled, turned the key in the lock of Nina's door. I spoke before I opened the door. There came no sound from within. I stood for a few moments silent, then went in, and I think I was scarcely surprised: I felt only a little more strange and hopeless than before when I found the room empty, the bed unslept in, and the window open.

CHAPTER THE FOURTEENTH.

IT was a little singular that while I was in the first horror of this discovery, two letters—one for myself and one for Nina, both addressed in a well-known handwriting—should be given to me.

"Shall I take in Miss Nina's?" said the maid.

I was outside my cousin's room, with my hand upon the door-latch, holding it closed. I answered hastily—

"No; she is not to be disturbed yet," and asked if my father was up.

The girl told me he had been in his study for some time. I went to speak to him, and as I went I broke the seal of my letter. If any one could bring comfort and help at such a moment, it would be Eugene; and indeed his letter contained news that but yesterday would have transported me, for his task had been accomplished with a success that transcended his wildest hopes. Guided by M. Dubois, who had a large acquaintance amongst musical professors, he had succeeded in procuring some of the best interpreters for his music. Henry had used his influence amongst literary men, and the curiosity of Londoners had been aroused. The season had about run its course; no-

thing was going on in the world ; people were beginning to languish for novelty ; and upon minds thus biassed the intimation made in several of the daily papers and weekly reviews that the new music, whose first performance had been duly advertised, was of a peculiarly high character, and that the history of its composition was romantic, had special force. The English public are naturally sentimental.

The rumour whispered abroad of the dead composer who, for lack of means, had never been able to make his voice heard, and of the young pupil who had given himself to the task of vindicating his talent, touched people's hearts. Even before the music had been performed many had made up their minds to find it wonderful. Had there been twice the number of tickets, Eugene wrote, they could have been sold with ease. Long before the doors of the great hall where the performance was to be given were opened, they were besieged by an eager throng. It was truly a magnificent audience that waited with impatience for the first notes of the overture to sound.

And there was no *contretemps*, absolutely none. The success was prodigious. "We propose," wrote Eugene, "to give another performance on Saturday, and I should like you and Nina to be present on the occasion, if it will not be too much for her ; however, this matter we can discuss later, for I shall be with you shortly after this letter. I wrote because I wished you to hear all this from me before you saw it in the paper. Watch Nina when she opens her letter, and tell me exactly how she looks. If we have many more such nights as this, I shall have a comfortable little fortune to hand over to her."

So Eugene's letter ran, and sad enough it sounded outside Nina's room.

With a heavy heart I went to my father, and told him that Nina had gone. He seemed staggered.

"I spoke to her kindly," he said over and over again, as if he were seeking in his own conduct some reason for her rash step ; but when I told him what James had done, he shook his head. "Ah ! then I understand. My poor child has her mother's spirit in her."

We discussed what we should do. My father proposed to send searchers in every direction ; I shrank from giving her flight publicity. I proposed to say



"'FATHER,' SHE WHISPERED, 'THIS IS UNCLE RICHARD'" (*p.* 359).

nothing to any one. If my father went one way, and I another, we might find her. While we talked there came the sound of wheels outside. Could she have returned? I rushed to the window, to meet Miss Ashley's cold smile and imperious beckoning gesture. I begged my father to refuse to see her. He answered that he did not think we could so treat a neighbour, and suggested that she might bring news about Nina.

Meantime, James, who had let her in, was knocking at the study-door.

"Miss Ashley, father, on important business."

Miss Ashley had scarcely waited to be announced. There she was behind him, all fluttering with excitement.

"My poor friend! my poor friend!" she cried out, extending both hands to my father. "To lose them both in this way! Oh! it is sad—sad! But the daughter has not the same excuse as the mother. Look up, my dear friend. Have courage! They say she is privately married."

I cried out to her that she was killing my father. He bade me be silent, and, turning to her, asked in a strangely constrained voice if she had seen his niece, and where she was.

Begging him again to be composed, Miss Ashley said that very early in the morning—at break of day—a servant of hers had seen Nina at the gate of the Old House. A man let her in, and, though the house had been very closely watched, neither had been seen to leave it.

"As it happens," proceeded Miss Ashley, "I have just had a key made to fit the gate of the Old House. So many curious things have been going on there lately, and I, being the only neighbour and a lonely woman, thought it right to be on my guard. Only yesterday one of my people went through the place, but found nothing. They say you know the ins and outs of the place as no one else does. Had you not better come there with me at once?"

Terribly pale, and haggard beyond power of expression, was my dear father's face, and my tears were falling so that I could scarcely speak or see. He put his hand on my arm.

"Mary, my dear," he said, "get ready to come with us. Miss Ashley, will you be kind enough to sit down in the drawing-room? In five minutes' time we will join you."

I knew how he would spend that five minutes; but with all my knowledge of his character, I was not prepared for the change they had wrought in him. Pale he was still, and very quiet in his manner, but the haggard anxiety had gone from his face. Heaven had sent him a good inspiration. This composure and quiet assurance of my father's made me much happier and more hopeful.

James was with Miss Ashley in the drawing-room.

"You will come with us to the Old House," said my father. "Tell your brother I should be obliged by his coming as well."

James looked surprised. But he answered, "Oh, certainly!" and we all started together.

My father kept my hand within his arm as we went.

"You and I believe the best," he comforted me by whispering in my ear.

Presently we stood at the old rusty gates. Miss Ashley, or the busy member of her household who was up at day-break, had spread the strange story through the neighbourhood, and there was a crowd of idle boys and women hanging about. I was not at all surprised to see Horace Green on its outskirts. He was whittling a stick as before, and whistling a lively air; but I knew he was on the watch lest any harm should befall Nina. I beckoned him to join us.

James, meanwhile, was speaking to one and another of the crowd, and asking them angrily what they meant by hanging about and creating a disturbance. The habit of obedience to authority is strong in our village, and some were beginning to move off when my father addressed them—

"My friends," he said mildly, "I should like you all to stay here. You have been perplexed lately. Curious things have been going on in this house. It is natural you should wish to understand them. I hope to-day to be able to explain everything to you."

They fell back respectfully to give way to him. There were whispers of "The rector's a guid man, that he is!" as, with courteous acknowledgment of curtseys and nods and doffed caps, he passed through them. Even I was surprised by his entire and perfect confidence; but what the feelings of Miss Ashley must have been it was difficult to imagine. She was delicate enough to pause at the open gate. "Perhaps," she said, "you had better go in alone—if——" and she stopped.

Then first I saw my father's face cloud, but he did not speak; he only stood aside persistently for her to precede him through the gate. He now headed the little procession: my hand was still on his arm; on my other side walked Horace, whistling under his breath; James and Miss Ashley and Henry followed us behind; then trooped in the women and children of the village. There was an old terrace in front of the house; we went up the steps which led to it, entered the house by a large open window, and crossed the large deserted dining-room. It was panelled with old oak. One of these panels my father touched: it flew back, disclosing a small dark staircase. "Don't be alarmed, Mary," said my father. "Give me your hand—so," and he helped me down. "I will lead the way. Your Aunt Laura and I hid from our lessons here many a day when we were small."

There was a door at the bottom of the stairs. He turned the handle, it yielded, and I saw a small room, hung round with red curtains and lighted by a small oil-lamp. Then we heard a voice crying out, "Who is there?" and I saw suddenly springing up, erect and fierce, with one hand pushing the curtain and the other defiantly clenched, with eyes out-staring, with knit brows and dilating nostrils, a woman's form. I put my hand before my eyes. Could this be Nina?

Very gently my father passed her by. I heard his

voice from behind her : "Alexis, is this you? Have you come to us after these many years?" And then, in a tone of reproach, "I thought you knew me better."

A quiver seemed to pass through Nina's frame as on her ears, as well as mine, these words fell. Her arms dropped by her side : she turned round, gasping for breath ; and I saw behind her, seated on a low camp-bed, a small, pallid old man, with white hair, clear-cut features, and bright eager eyes. He looked about him like one bewildered. My father took a seat near him on the bed. "Did you not know that you would be welcome, Alexis?" he said. "Why have you played with me in this way?"

Nina went to him and knelt by his side. "Father," she whispered, "do you not understand? This is Uncle Richard."

"Your uncle? My Laura's brother?" he murmured.

"Yes—yes."

The old man put out his lean withered hand. "Take him away, Nina ; take him away. I told you if you betrayed me you should never see my face again. I told you he had called me a traitor, and said that I should never cross the threshold of his door, and when I heard it I vowed that I would not."

"And, father," cried Nina, "I told you ——"

"You said you would go with me," broke in the old man querulously.

"And so I will," cried the girl, now weeping bitterly ; "so I will."

My father interposed. "Alexis," he said, "those were strange words you used just now. Who told you I said you were a traitor, and vowed you should never cross my threshold?"

"One who knew," answered the old man sternly. "She was your friend and intimate ; she was my Laura's friend once—a woman without soul or judgment. Yes, I remember her name : it was Elizabeth Ashley. And I said that day—she would tell you—that I was as proud as others. If there is an aristocracy of money, there is an aristocracy of mind. I said that never in all the hereafter, whatever might befall me, would I accept from you an hour of shelter, and I have kept my word. The money from England was my Laura's—her right—and while she lived I let it come. Afterwards I could not. My child had been taught to love her mother's English home, and I believed—falsely, oh! yes, falsely, my Nina—that she did not care for her old father ; so I pretended to be dead, and sent her away. But the longing to see her face again, and the desire to give her love a trial, became too strong to be overmastered. I knew this place. Many a time, after our secret marriage, did my Laura and I spend our hours in its deserted rooms. It came into my head to play the ghost here for a few days. By my violin, which I brought with me, I drew the attention of my child, and frightened away all others. When I had seen her, I would have gone in peace. I knew she was happy. I was sure she loved me. But it pleased God to strike me with a sudden weakness, a premature old age, which frightened us both. For some days I was bound to this bed. I could not, if I would, have dragged my old limbs away ; and Nina nursed me, and her coming and going became the sweet habit of my life. I could not have been without it. So the days wore on : the pleasant summer days. I sometimes prayed for death to come, while we were happy and at peace together ; but death smiled at my poor wishes. I became stronger, and planned to go away again alone. She found it out—how, it is impossible to say. She has strange ways of reading into one's soul—and she made me promise that when I went it should be with her. We were going to-night, when all was still—I with my violin, and she with her voice, to pick up pence amongst the poor, and feed like the birds in winter upon the love of those whom our summer songs had gladdened."

"But I have found you," said my father in a deeply moved voice. "And now you will gladden our hearts, Alexis, the hearts of those that love you. Listen to me"—he offered his hand. "I pledge you my word that what you have heard is false. I never called you traitor, never, when my sorrow was at its freshest. So far from saying that you should never cross my door, it has been for years my dearest wish to see you and my beloved sister at my home. You must have mistaken Miss Ashley. She is there, outside ; I will fetch her."

He went to the door, but Miss Ashley had gone. She would not stay to be questioned.

And meanwhile I had given Nina her letter, and she was trying to make her father understand the joyful news it contained. He was no poor and obscure man now : he was a musician whose work had been recognised.

It was marvellous how this news changed the complexion of things to him. I began to understand the weakness in his nature, the weakness which had rendered even his genius inoperative, when I saw how the composer's gratified vanity transfigured him.

"At last," he said in a low voice, "at last my worth is found out!"

Before many minutes had passed he was patronising us all.

But more had to be done that day. My father had promised to right Nina, and explain to his people the mystery of the Haunted House. So, by the permission of the musician, now radiant and happy, he went outside and told the whole story to the people gathered together, and there were shouts for the dutiful daughter, and cheers for the father come to life again ; and Horace, who had been the main cause in the prevention of what might have resulted in a serious tragedy, came in for his share of the acclamations of the populace.

But he was quite shamefaced ; only when Nina came out and pressed his hand, and thanked him with tears in her eyes and a tremor in her voice, his confusion fled. He said, "I would do it ten times, a hundred times over for one other such a pleasant day as that of our cricket-match."

Then off he dashed to meet a lumbering family coach that was creeping along the road.

It was his aunt's, and his aunt was in it, and she

put out her rosy face and asked if anything was the matter, and if she could help any one.

Horace insisted that she should alight, and he would have the chariot opened and driven into the grounds of the Old House, "for Nina and her father shall go home to the Rectory in state," said the boy. To which, when she had heard everything that had happened, Mrs. Green readily agreed. The fine old carriage was driven up before the ancient stone terrace.

Nina and her father, Mrs. Green and my father, stepped in. They drove away slowly, Horace and I following, and lo!—how it happened I cannot tell—but all the village was out at its doors, and children were crying out, and women were weeping and laughing by turns, and flags were waving in the sunshine, and flowers in handfuls were being rained down upon the earth and thrown into the carriage. Susan Pill was at her door in a bright-ribboned cap, looking almost young again, and beside her was the timid Mrs. Pike, holding her delicate boy high in her arms, and telling him to look at the dear, good young lady. Never, I am sure, had such a rejoicing been seen. News had been taken to the Rectory, and the servants, on their own responsibility, had laid out the neglected breakfast, enriched by several extra dainties, on a table under the elms on the lawn. But better than all to me was James's face—for he was at home before us—as he stood at the door waiting for our arrival. "You were right, Mary," he said to me; "I was wrong. But who would have thought it?" And when, with ceremonious politeness, he had helped Nina out of the carriage, he asked her pardon before us all for his mistrust.

* * * * * *

There are, or ought to be, a few more words to say, but I am afraid I am not the person to say them. Were I an impersonal narrator, I should know by instinct about the interesting scene of the evening; and had I the good luck of most autobiographical writers, I should have been, by accident purely, behind a curtain, or on the other side of a tree. I have not, and therefore all I have to say is that late that evening, while I was in the drawing-room, talking over all the strange events of the day with my dear old friend M. Dubois, when Henry and James were in the morning-room, and my father and uncle were shut up together in the study, the lovers who had trusted one another from the beginning met under the stars.

What they said one to the other they never told me; perhaps some of us may imagine. But they came in—I am speaking now from personal observation—with rosy faces and shining eyes.

THE END.

GIRLS' FOUNDATION SCHOOLS.

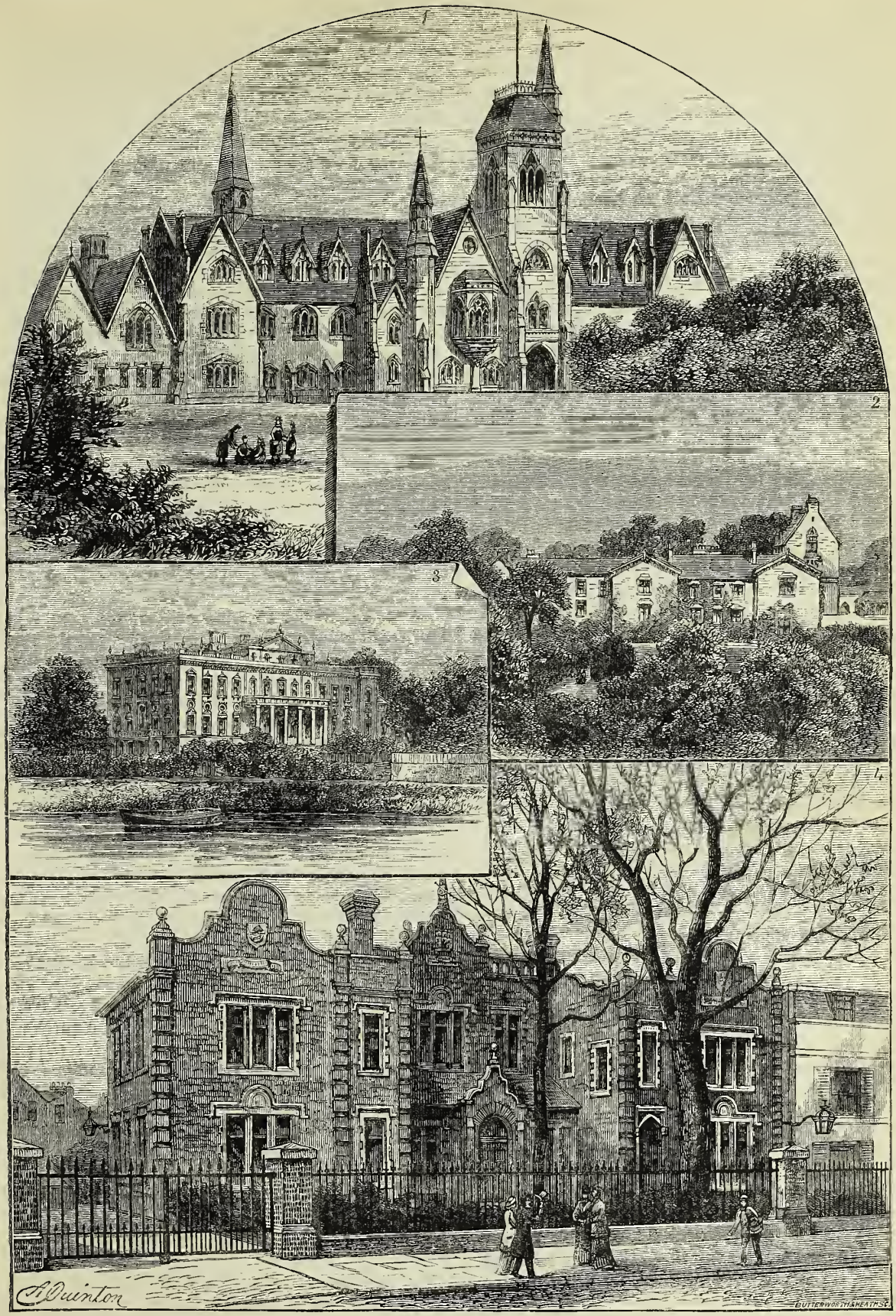
THE education of our girls is a subject that is perpetually being brought forward and discussed in the present day, although it attracted little or no attention during earlier times. Kings, queens, priests, and nobles in olden days made tolerable provision for the teaching and training of boys, but seem to have entirely overlooked the weaker vessels, probably supposing that they needed but little lore save such as could be learned of their mothers and grandmothers within the sphere of their own homes. But though even such virtuous women as the wise men of old were wont to picture may be trained without the aid of schools or primers, we must remember that

"The thoughts of men are widened by the process of the suns;"

and it has come to pass that there is and has been a growing desire that the minds of women should be developed, and the storehouses of learning thrown open to them, so that, as all cannot be wives, mothers, and housekeepers, the remainder may be capable of finding happiness, and in many cases independence, by the exercise of their mental faculties.

Female education has, until within the last few years, usually been a work of entirely private enterprise, and any teaching worth having, costly, and very far beyond the reach of those classes of the community to whom it is of the most vital importance. The cheap yet good grammar schools to which so many parents could send their boys, in the comfortable assurance that if industrious they might win exhibitions that would help them on and up in the world, had no counterparts for the daughters, and consequently it was not uncommon for men who had worked their way to good professional positions to have homely mothers and sisters, with abundance of common sense and housewifely knowledge, but very little of what may be called book-learning. The first person who endeavoured to lessen the expense of female education for those whose "hoards are little" though "their hearts be large," was the Rev. Carus Wilson, a north-country clergyman, well known in his own day, who in 1823 instituted a school at Cowan Bridge, Yorkshire, for the daughters of the poorer clergy of the United Kingdom. This was the mother of all similar establishments, one of which was founded at Gloucester in 1831, and afterwards removed to Bristol; one at Brighton in 1836, and one at Warrington somewhat later. The house at Cowan Bridge was soon filled, and as in the course of a few years it proved inadequate for the continually increasing number of pupils, a larger building was erected in 1833 at Casterton, near Kirkby Lonsdale, in Westmoreland, which has since been added to in various ways, and is now a flourishing school, and fully up to the educational requirements of the age.

The terms are really low, and must have proved an



ROYAL SCHOOL FOR DAUGHTERS OF OFFICERS IN THE ARMY, LANSDOWN, BATH. 2. SCHOOL FOR DAUGHTERS OF THE POORER CLERGY, AT CASTERTON, KIRKBY LONSDALE. 3. ROYAL NAVAL FEMALE SCHOOL, OPPOSITE RICHMOND. 4. LADY HOLLES' SCHOOL FOR GIRLS, HACKNEY.

inestimable boon to many parents of large families of girls, most of whom have to look forward to the fruit of their own exertions for a livelihood. Only £18 a year is charged for a complete and thorough course of instruction in English and French, with board, washing, and lodging; while German, drawing, piano, organ, and private singing lessons may each be had at the rate of £4 per annum. All payments must be made half-yearly in advance, which gives the administration a certain amount of ready money in hand; but this has to be largely supplemented by donations and subscriptions towards the maintenance of the pupils and teaching staff, and for the ordinary expenses of keeping a large building in repair, servants' wages, &c. &c., all of which items reach a considerable total for a household of 120, and frequently 133 girls, and the necessary governesses. Children cannot be admitted when over twelve years of age, and as there are seventy scholarships of £7 per annum, and eight of £30, they have every incentive to work steadily onward, starting from a time when they may be reasonably expected to grasp the rudiments of their various studies, and make more assured progress than is usually the case when they are taken up later.

The gifted authoress, Charlotte Brontë, who struggled up to fame alone and unaided from the depths of a Yorkshire parsonage among the dreary moors, was in her childhood a pupil of this earliest Clergy Daughters' School, and was extremely antagonistic to its rules and regulations. Many will remember the storm that followed her picture of it in the opening pages of "Jane Eyre;" but she was doubtless the square girl who could not be fitted into a round hole, and the kind of embryo genius with whom the common course of life would not run smoothly. In fact it never did, even when she found her own vocation, wore the crown of fame, and rejoiced in the comparative affluence that was the reward of her labours.

The secretary and committee of the Royal Naval Female School at St. Margaret's give the following information about their founder and the advance of the good work he set going :—

"This institution originated in the benevolent design of the late Admiral Sir Thomas Williams, G.C.B., who, with a view to its formation and permanent establishment, munificently bestowed the sum of £1,000, to be invested in trust as the basis of an endowment fund; and, in order to meet the usual difficulties of a newly-formed institution, he further most liberally arranged that the rent of the establishment at Richmond should be defrayed from his estate, by the additional contribution of £100 per annum, for a period of seven years."

This was in 1840; but in 1856 the committee had a stroke of good fortune in buying premises that were eminently suitable at a remarkably cheap rate. It so happened that the late Earl of Kilmorey, desiring a mansion on the banks of the Thames opposite Richmond, contracted with a firm of builders to erect one for him at the price of some £20,000. When finished, however, his lordship did not care for it, and the house, with its six acres of freehold ground, was purchased for its present purpose for £9,500, after which £6,000 more was spent in the formation of roads and building of laundry, lodge, and chapel.

The number of pupils is limited to ninety daughters of Naval and Marine officers, receiving to the full, as far as circumstances will permit, the advantages proposed by the benevolent founder; twenty-seven are received at the annual payment of £50; sixteen at £25; forty-two are boarded and educated at the entire charge to the parents or guardians of only £12 per annum; and five others, whose fathers died during the Crimean War, are nominees of the Patriotic Fund, at £10 per annum; the establishment defraying the larger amount of actual cost through the means of voluntary contributions. At the present time there are on the reduced scale of payment five who have lost both parents; and twenty-five others have lost their fathers.

The ages for admission are from eleven to fifteen, except in the case of those whose means enable them to pay the maximum fees; but none can remain after they are eighteen, except under special circumstances. The education given is comprehensive, and includes all ordinary English subjects—Drawing, German, French, Latin, Music, Singing, and Drill. There is a short and sensible examination, according to age, which determines a girl's place in the school. Admission at £12 a year is obtained by the votes of subscribers. The elections take place annually in July, and all applications must be at the office before April 20th. Every donation of ten guineas gives five votes, and of two guineas one vote; while annual subscribers of £1 have four votes, and of 5s. have one.

The scholarships, though neither very numerous nor very valuable, yet serve as incentives to exertion, and are prized by persons of limited means, to whom every pound is a pound, and represents twenty shillings' worth of comfort and advantage. There are two founded by friends of the late Lady Grey, and called by her name; they bring in £12 a year each, and the pupils eligible for them must be orphans or fatherless, elected by the subscribers, or nominated by the Royal Patriotic Fund. They are awarded annually by the committee with reference to general conduct and progress, and the same pupils may hold them for more than one year if they deserve to do so.

The Bruce Scholarship was presented to the school to perpetuate the memory of the late Admiral Sir H. W. Bruce, K.C.B., and is of £8, awarded on the following conditions :—The three Upper Classes are allowed to elect, by a majority of votes, one of the three young ladies who have obtained the highest places at an annual examination, open to all the pupils in the school whose conduct has been thoroughly satisfactory, and the one thus elected is called "Bruce Scholar" for the year.

The scholarship in memory of the late Rear-Admiral F. Warden, C.B., is worth £10, and is given for scriptural and religious knowledge, under conditions similar to those of the "Bruce." A promoter and trustee of this scholarship was Vice-Admiral

E. P. Halsted, some of whose friends have established a small fund for the purpose of presenting the "Warden Scholar" of each year with a reference Bible, and if there should be any money over and above what is necessary for this purpose, it is added to the scholarship.

Queen Adelaide, the widow of William IV., England's sailor-king, showed her affection to her husband by doing as much as she possibly could for the members of his profession. About the time of her decease the Naval Fund bearing her name was founded, the committee of which have the power of granting £12 a year each to three or four girls in the Royal Naval School (Lady Grey's scholars excepted) who have been admitted on the £12 or reduced list, and tenable as long as they remain in the school, provided the half-yearly report of their general conduct be satisfactory to that committee.

The Onslow Prize of £10 is given annually to the pupil who has attained the highest number of marks at the yearly Cambridge examination of the school, provided that such marks be not less than 75 per cent. of the full numbers. Good conduct is also essential, and the holders of more than one scholarship, with the exception of Lady Grey's, are ineligible.

It need hardly be said that so many privileges and so liberal an education can only be provided by a large number of subscriptions in addition to the fees paid, and as long as the British Navy guards the "Empire of the Seas," it is sincerely to be hoped that generous contributions may be forthcoming, in aid of those who are left widowed and fatherless by the death of the brave men who "go down to the sea in ships" and give their lives in doing the duty that England expects of them.

The Royal School for Daughters of Officers of the Army, at Lansdown, Bath, is a younger establishment, dating only from 1864. The building is very handsome and admirably adapted for its purpose, but it has proved to be desirable to take Clarence House, Roehampton, which was at first used simply as a junior department, although it is gradually losing that characteristic, and will probably be ultimately on exactly the same footing as its elder sister at Bath. The object of the institution is to bestow on orphan or other daughters of officers of the Army a good practical, religious education, at the least possible cost. The families of Royal Marines, and of officers who have sold out or otherwise retired from the service, provided the children were born prior to such retirement, are eligible, and the education is in all cases in accordance with the doctrines of the Church of England. The governing body consists of a President, 24 Vice-Presidents, 3 Trustees, and 40 members chosen from the subscribers, 5 of whom form a quorum; 13 of the latter go out in rotation every year, and the vacancies are filled up by the governing body, and thus a circulation of fresh men and ideas is constantly kept up. Every donor of five guineas is a Life Member, with one vote for every five guineas contributed; and every annual subscriber of half-a-guinea is a Member, with one vote for each half-guinea contributed. There are other qualifications, but space forbids us to detail them.

Candidates for election into the school are admitted by the votes of members, and their claims must be founded partly on the father's services and partly on the limited means and other circumstances of the family. These claims are subjected to the judgment of the governing body, who draw up lists of the candidates they approve and forward them to all who are entitled to vote. Each pupil duly elected pays £12 per annum, but if the funds ever become sufficiently large to enable the authorities to lower the payment where they think it needful, or even to take some girls without any at all, they will have the power of doing so. The number of elected pupils is never to be less than seven-twelfths of the whole school. If, however, any so elected, or their parent or guardian, is known to have or to become possessed of private means sufficient to justify the payment of higher terms, these are charged at the rate of £30 per annum; and a limited number of daughters of officers who are well-to-do in the world are admitted at £80 a year, though these figures may be varied according to circumstances. No distinction, however, is made amongst the pupils, or in the education given to them, on account of differences in the payments.

Candidates must be between the ages of ten and fifteen, and no pupil may remain in the school after she is eighteen, except under very special circumstances.

The committee reserve to themselves the power of placing the pupils either at Bath or Roehampton, according as they see fit, and all are considered for the first twelve months after admission as probationers. The votes of unsuccessful candidates are carried forward from one election to another; but those who at the end of four elections have neither been elected nor obtained 1,200 votes may be, at the option of the committee, excluded from the list of candidates.

The only scholarships attached to it arise from the interest on a sum of £2,400 presented by a lady to perpetuate the memory of the late Lieut.-Col. Squire of the Royal Engineers, a distinguished officer, who succumbed from fatigue after the siege of Badajoz during the Peninsular War. The value of them is never less than £12 each, and they are awarded twice a year; pupils of the first and second classes of both schools being eligible as competitors.

A school of a very different type, but which is probably destined to be only the first of several bearing the same name, and giving the highest education at remarkably low terms, is the Lady Holles' Middle-Class School for Girls, recently built on the site of an old mansion called the Manor House, Mare Street, Hackney, the garden of which, with its fine mulberry-trees and shady walks, is still retained. It sprang originally from a bequest in the will of Lady Eleanor Holles, a daughter of the second Earl of Clare, who died in 1708 and left the residue of her property to be disposed of by her executrix, Mrs. Anne Watson (a daughter of Lord Rockingham), to such pious purposes as she might think fit. This lady evidently wished to see the rising generation of girls educated in all useful

knowledge, and invested her friend's money in ground rents in Fort Street, which produced £62 3s. per annum, and was vested in trustees for the maintenance of a mistress and the instruction of 50 poor girls in the parish of St. Giles', Cripplegate. She herself added £500 by will, and in 1769 Mr. John Bristow, of the secluded village of Ellesborough, among the Chiltern Hills, left all his funded property to the schools of St. Mary-le-Bow, St. Ann, Aldersgate, and St. Giles' Without, Cripplegate. The portion of this legacy which fell to the share of the trustees of Lady Holles' school was £2,000 in Bank and South Sea Stock, and some smaller benefactions came in from time to time. The number of pupils was increased from 50 to 100, and afterwards to 150; but as the value of property went on increasing and interest accumulating, a scheme was submitted to the Council of Education in 1876 for enlarging the sphere of action and providing for a larger number of children in the original parish, and extending the privileges of education to others who can afford to pay a certain amount.

The present state of things is that at suitable premises in Red Cross Street there is an elementary school of 200 girls, 100 of whom are clothed as well as taught, and 104 infants who receive such instruction and attention as is needful at their tender age. About £10,000 worth of Bank Stock was sold out for the erection of the Mare Street school, reducing the income of the trust by £300 a year, though it still realises £1,100 per annum from house property.

The affairs of both establishments are managed by twelve governors, three of whom are ladies, whose judgment in dealing with the teaching staff and on domestic matters is exceedingly valuable. The Hackney school cost altogether something under £10,500 by the time it was open to the public in September, 1879, and the course of instruction it offers includes French, German, Latin, all English subjects, Theory of Music, and Drilling. Children are eligible at eight years old, but unless working as pupil-teachers cannot remain after the end of the term in which they attain the age of sixteen; and the fees are £4 a year for those who are under ten, £5 for such as are between ten and fifteen, and £6 for all above that age. The Piano, Harmony, and Dancing being extras, are charged for at the rate of three guineas a year each; there is an entrance-fee of 10s. per head, and the governors require a deposit of 10s. as a guarantee for books, &c., which is returned when the pupil leaves. A good circulating library is open for the use of the students, the subscription to which is 1s. per term. The pupils are prepared for the University Local Examinations, and for those of the Art Department, and Trinity College, London.

The exhibitions are—two free scholarships, exempting the holders from payment of fees for the general course during one term, and are assigned to such girls as on entrance examination obtain not less than 75 per cent. of the maximum number of marks for English Reading, Writing from Dictation, Parsing and Analysis, English and Scripture History, Geography, Arithmetic, and plain Needle-work.

Two exhibitions, covering the whole fees for the general course, and tenable for one year, to pupils taking respectively the highest place in second and third divisions; and

Three exhibitions of the value of £20 each per annum, tenable for two years at a training college, or other place of higher education, which are open to girls who have been three consecutive years in the school. These will not, of course, be available till the summer of 1881, and all of them will be liable to forfeiture in the event of misconduct or failure to maintain a reasonable standard of proficiency.

This middle-class school occupies a unique position, and is in many ways untrammelled and free to work out its own theories of education and discipline. The Head Mistress, like Dr. Arnold, watches the moral influence of one pupil on another; and where there is an incorrigibly black sheep, takes steps for her immediate removal. Quite a new feature is the carrying forward of prepaid fees to another term where children are absent in consequence of infectious illness; and the arrangement of school hours from 9.30 a.m. till 3 p.m., with an interval for lunch, is a great benefit both to teachers and taught. Though no expense is spared, the school is already self-supporting and quite full, and in the course of time, as money goes on making money, a similar one will be built in another locality; and thus cheap yet high-class education will be brought within the reach of hundreds who, twenty years ago, were asked an almost prohibitory price for vastly inferior instruction.





I Met my Love at Morning.

Words by Dr. J. F. Waller, *from "Cassell's Magazine."*

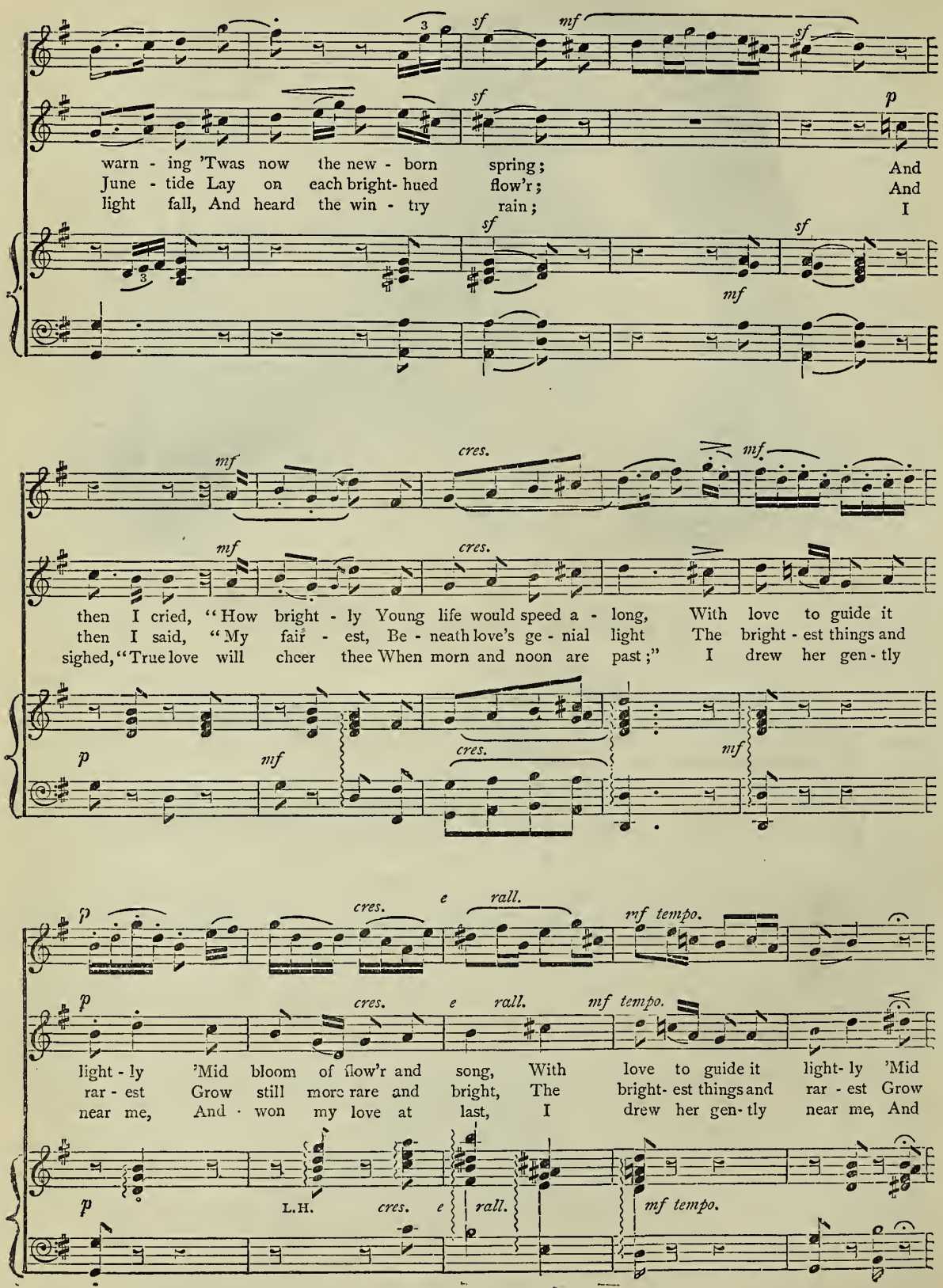
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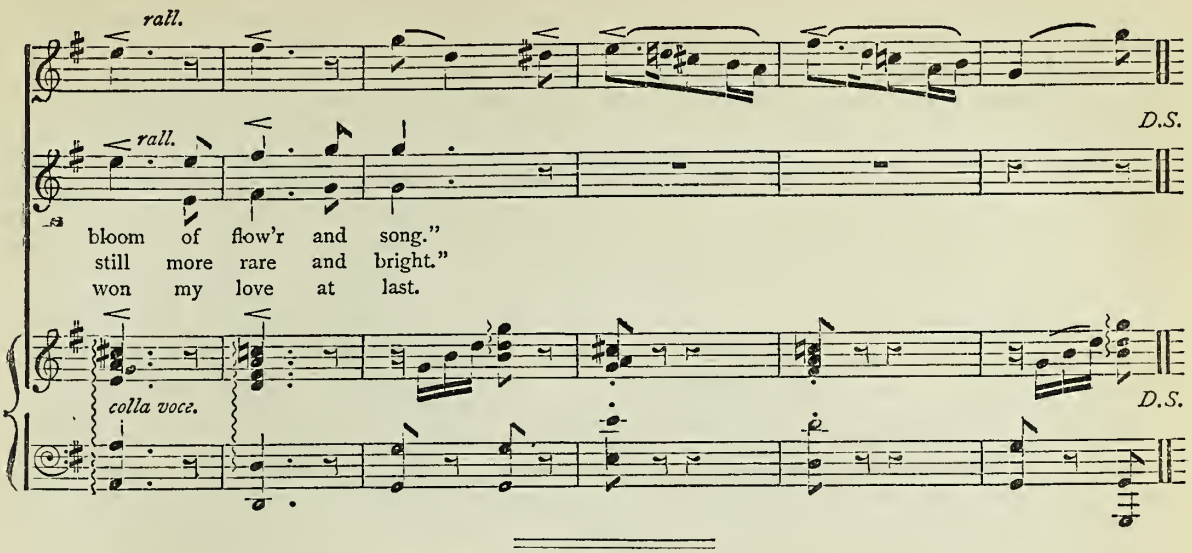
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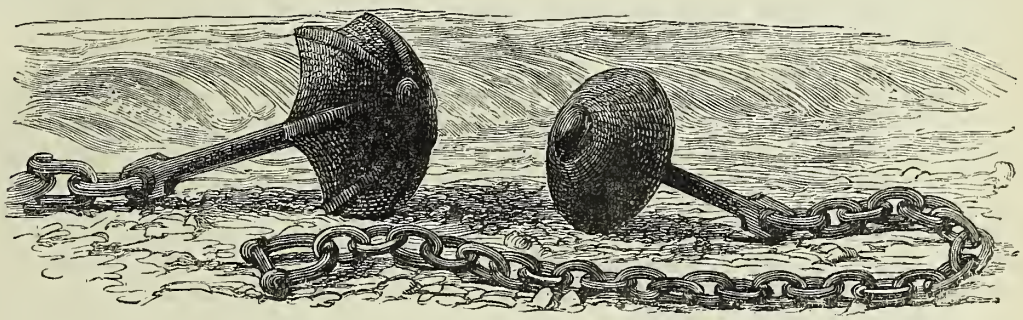
Violin.

Piano.

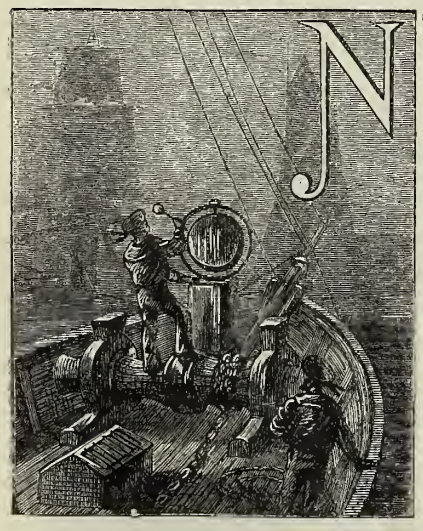
1. I met my love at morn - ing, When birds be-gan to sing, And but - ter-cups gave
2. I met my love at noon - tide, 'Twas in a syl - van bow'r, And warm the sun that
3. I met my love at night - fall, Be - side the lat - tice pane, And mute we watch'd the


warn - ing 'Twas now the new - born spring; And
June - tide Lay on each bright- hued flow'r; And
light fall, And heard the win - try rain; I
then I cried, "How bright - ly Young life would speed a - long, With love to guide it
then I said, "My fair - est, Be - neath love's ge - nial light The bright - est things and
sighed, "True love will cheer thee When morn and noon are past;" I drew her gen - tly
light - ly 'Mid bloom of flow'r and song, With love to guide it light- ly 'Mid
rar - est Grow still more rare and bright, The bright- est things and rar - est Grow
near me, And won my love at last, I drew her gen- tly near me, And
L.H.
sf
mf
p
cres.
e
rall.
mf tempo.





THE WORK OF THE LIGHT-VESSELS.



NOT the least important branch of the public duties which the Legislature entrusts to the Corporation of the Trinity House, an account of which body appeared in this Magazine not long ago, is that pertaining to light-vessels. The first light-house under the management of the Trinity House was, as stated in that account, erected in 1680, but it was not until 1732 that the first light-vessel was instituted; and to the Nore belongs the honour of being the station at which that vessel was placed. Only four other light-vessels appear to have been established by the Trinity House during the last century, viz., the *Dudgeon*, the *Owers*, the *Newarp*, and the *Goodwin*; but during the present century light-vessels have been moored at suitable stations all round the coast of England and Wales, and there are at the present time forty-three such ships under the control of the Trinity House. These vessels perform a most useful service. Even a landsman does not require to be told that there exist around our coast perilous rocks and sands—many of the latter of a movable nature—which do not afford a proper foundation for the erection of a lighthouse, but the presence of which it is nevertheless essential, in the interests of our maritime commerce, to indicate by marks that shall be visible both day and night. Such, for example, are the Seven Stones rocks, midway between the Land's End and the Scilly Islands; and the ill-famed Goodwin Sands on the east coast of Kent

To guard the mariner from dangers like these our light-vessels are brought into requisition.

The earliest of these ships were rough and imperfect craft that had often been originally old Dutch galliots, but were bought up, and set to do their warning work, by the English lighthouse authorities; and there is still to be seen a model of one of them—

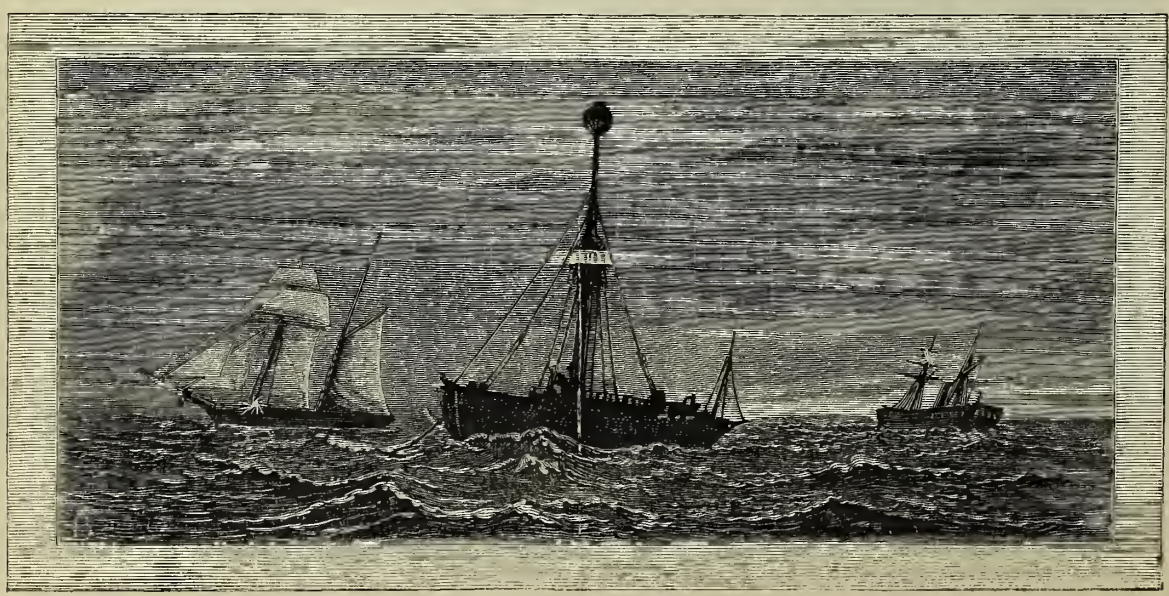
the *Dudgeon*—with the lights suspended at the ends of the cross-yards, not unlike, as has been humorously observed, "a Chinese junk celebrating a feast of lanterns." Light-vessels of the present day are, however, fine ships (usually wooden) of from 130 to 212 tons, and their cost, including outfit, averages—according to size, description of illuminating and fog-signal apparatus—from £5,000 to £10,000 each. Their shape is, of course, determined chiefly with a view to their riding well, and not to their fast sailing. A fair speed is, however, to be got out of them when requisite; and they are all provided with complete sets of sails, for use in case of necessity.

Light-vessels have one, two, and sometimes three masts, from the tops of which they exhibit their lights, the lanterns being built around the masts, up and down which they are constructed to slide. At sunset the lanterns are hoisted to their full height, averaging, according to the vessel, from 14 to 38 feet; and at sunrise they are lowered into a house built to receive them on the vessel's deck, where they remain until the next sunset. The light-vessels of England and Wales are painted red, and have their names written in large, plain letters on both of their sides. They are further distinguishable during daylight by balls, triangles, &c., hoisted at their mastheads.

The lantern in which the light is shown from a light-vessel is usually octagonal, six feet across from external angle to angle, three feet high at the sides, and four feet ten inches to top of roof. The roof and bottom of the lantern are copper, and the framing is gun-metal. The lantern is made in halves, so as to ship on the mast, and is glazed with three-eighth-inch plate-glass. The lamps, which are Argand, gimballed to counteract the rolling of the vessel, are fitted in the centre of twelve-inch diameter parabolic silver-faced reflectors, and are ranged side by side in one, two, and three circles in the lantern. The light, which is produced by colza oil, is sometimes fixed and sometimes revolving. When revolving, the optical apparatus is driven by clockwork. Ten miles, in clear weather, is the usual maximum distance at which the beacon-light of one of these ships may be seen.

The foregoing description of the lantern and illuminating apparatus applies to light-vessels generally. In some recent cases, however, important improvements have been effected in these parts of the ship. The lantern has been made larger for receiving reflectors of twenty-one inch instead of twelve-inch diameter, and for more convenient access to its interior; iron has been substituted for gun-metal in the framing; the shape of the lantern has been altered from octagonal to cylindrical, thereby reducing to a minimum the obstruction offered to the beams of light by the framing; and, lastly, the lamps and reflectors have been arranged to produce groups of flashes, followed by a comparatively long interval of darkness, the main net result of which modifications is that the consumption of oil is less than with the fixed or constant-light system, the intensity of the light considerably greater, and the scope for imparting distinguishing characteristics to a station—a most essential point—widely developed.

A matter of primary importance in connection with light-vessels is that they should not break adrift from their moorings. Their doing so might not only prove a dangerous thing for themselves, but a much more dangerous thing for those ships that should thus be deprived of the protection which their warning presence affords. Accordingly their moorings are of the most substantial character. These usually consist of a 40 cwt. mushroom anchor, and a vertical riding cable of 1½-inch chain cable, though, in narrow channels, a smaller anchor is sometimes used at each end of a 1½-inch chain, which lies along the ground for a considerable distance, and from the middle of which another chain of the same size rises as a bridle, or veering cable.



A LIGHT-SHIP AT NIGHT.



RELIEVING THE "GALLOPER" IN A GALE.

Until within the last few years, the only fog-signals in use on board light-vessels were gongs and guns. The gongs, which were of Chinese make, were suspended by a line, and beaten by hand with a gong-stick. (Our initial shows a man engaged in this act.)

We have said the only fog-signals in use until lately were gongs and guns; recently, however, these have been largely superseded in favour of siren trumpets, worked by caloric engines, and audible in fine weather at a distance of ten miles. On the first indication of fog, the trumpets are blown, and are kept sounding until the fog disappears. The blasts of these instruments are described as excruciating to the men on board; and, recently, a man was allowed to change into a light-vessel where there was no such fog-signal, the bellowing of the siren having made him positively ill. As a small set-off against the noise and nuisance of that apparatus, each of the crew of a fog-siren light-vessel is paid an extra fee of one penny per hour while the signal is in operation.

The crew of a light-vessel consists of a master, a mate, three lamplighters, and six seamen, one of whom may be a carpenter. Seven of these eleven men are always on board, and the remaining four on shore, at any given time. The master and mate are each alternately a month afloat and a month on land, but the rest of the crew are three months on board and one month on shore. Promotion is generally from the ranks, both seniority and good conduct influencing the selection for higher posts. The usual order of rising is from seaman to lamplighter, from lamplighter to mate, and from mate to master. The officer in charge of the light-vessel, whether the master or the mate, observes personally that the lamps are in good order, and that they are lit every evening at sunset, and kept constantly burning bright and clear till sunrise, and visits the masthead, to inspect their condition, once a least in every watch. He sees that the lamps and reflectors are cleaned and polished every morning, and the lantern-glazing rubbed free from dirt. He keeps the accounts of the ship, and maintains habits of frugality, cleanliness, and order on board; after 8 a.m. every day, appearing himself, and seeing that those under him appear, in the uniforms with which he and they are provided. He takes care that the guns and fog-signal are kept in good order, ready for immediate use; and, once every year, has the whole of the cables hauled up on deck, one at a time, carefully examined and blacked. He is specially cautioned, lest detriment should be caused to Her Majesty's revenue, against permitting any goods to be brought on board the light-vessel from any other ships, unless they are in distress; and is prohibited from allowing any of the crew to leave the light-vessel for any purpose whatever, save for the preservation of life, and then only when, in his opinion, assistance can be given without prejudicing the efficiency of the vessel. He sees that a watch of at least two persons is constantly kept upon the deck of the vessel, by day and by night. He causes constant attention to be given to the deep-sea lead, which is kept overboard, and takes such further proceedings, either by bearings or otherwise, as may best enable him to determine whether the vessel retains her proper station, causing the spare anchor, which is always kept in readiness for use, to be promptly let down, should any sign of drifting be observed. And, finally, he once at least on every Sunday assembles the crew, with the exception of the watch upon deck, either in his own cabin or other convenient place, and reads to them the Church Service for the day, and also a sermon or homily from the volume with which each light-vessel is provided.

The following is the scale of wages paid to the masters, mates, and crews of light-vessels, viz. :—

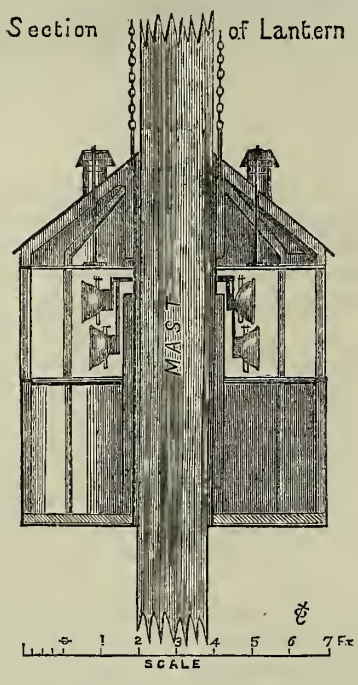
Masters	£80 per annum.							
Mates, according to seniority.	54	6	0	to	£61	10	0	per an.
Carpenters ,, .	41	2	0	,,	42	12	0	,,
Lamplighters ,, .	37	16	0	,,	40	10	0	,,
Seamen ,, .	34	10	0	,,	36	0	0	,,

The whole of the crew are victualled on board, and when on shore, are each allowed 1s. 7d. per day in lieu of provisions.

In addition to these wages and allowances, each man is provided with a suit of uniform clothing annually, and is superannuated when past active service. The crews are usually selected from the merchant service, and many of them belong to the Royal Naval Reserve, leave to attend drill in connection with which is granted during four separate weeks in the year, without deduction of wages.

On the whole, the men, as will be seen, are very well cared for; and it is only just to say that in return for the good treatment they receive, they are proud of, and a credit to, the service to which they belong.

It only remains for us, in conclusion, having now exhausted the official part of our subject, to afford the reader a gimpse into the unofficial, or leisure-life, of a light-vessel, which we cannot do more effectually than by quoting the following description, with which we have been favoured by one of the oldest and most respected of the Trinity House district superintendents. The account is given in our correspondent's own words :—



"Most of them (the crew) have something to do. Some are cobblers, make shoes and repair them for their own families; others rig models of vessels—smacks, brigs, and full-rigged ships; others make small wheelbarrows and toys gaily painted, veneered workboxes, &c. One man is an excellent hand at needlework; he has a frame of canvas with an outline picture prepared on shore, which he fills in with wool-work when at leisure on board. One man I knew some years ago, who painted his own portrait with the help of a looking-glass. The majority of them do employ themselves upon some of the various things I have mentioned; and, when a man has a hobby of that sort, it takes away the monotony of his life, and keeps up his intelligence; but I have known a few among them who are too idle to do anything except lie about upon the lockers and smoke their pipes; but such men become stupid in time, after serving some years of such a life, and are fit for nothing beyond their daily routine of keeping a look-out on foggy nights at some of the vessels. At certain times of the year they catch a good many small birds—larks more especially, which fly against the lanterns. They catch a few fish, but not so many as one might expect; either the running tide, or the sweep of the cable near the ground, destroys their sport. Upon the whole, I may say they are a good and steady lot of men, and do their duty very well. (The wild ones soon leave us.)"

Such is a brief account of our light-vessels. Notwithstanding the various compensating circumstances which have been noticed, one cannot help thinking that existence on board them must be a terribly dull, cheerless sort of thing. The life of an ordinary sailor—though Dr. Johnson has not less truthfully than wittily described it as "imprisonment, with the chance of being drowned"—can scarcely be styled monotonous, its conditions being, indeed, as variable as the fickle elements which govern them. The finely-graduated alternations of weather between the one extreme of a dead calm, when the mariner whistles to the breeze that will not be wooed by any such device, and the other extreme of a hurricane, when, in the words of the song—

> "The rushing waters rave,
> And the winds their revels keep,"

impart an ever-changing novelty and colour to his experience. But to lie lazily, and apparently aimlessly, at anchor on board a light-vessel, whose only varieties of motion consist in the less or greater degree of her rolling—to see glide gaily past the craft of every build and nation, from the little fishing-smack to the great ironclad, each urged not less by a living human impulse than by the wind or the steam which physically propels them, and to feel that *his* unromantic mission is for ever to occupy the same small spot of waters amid the infinite circles of the mighty deep, must, one is tempted to suppose, be intolerably irksome to a seaman's enterprising nature. One would think that the fingers of the hardy tar thus circumstanced must often itch to—

> "Hoist the sails and make the breeze
> Blow him along the liquid sea,
> Out of the regions where life doth freeze,
> Into the regions where he would be."

And yet—we speak from our own observation—these light-vessel men seem cheerful, contented fellows enough. Perhaps that use, which is second nature, has reconciled them to their floating gaol; perhaps even the most unemotional of them have "glimpses that make them less forlorn" of the noble end, that of saving life and property, to which their labours are directed. But anyhow, as we have said, these light-vessel men seem cheerful, contented fellows enough, and are certainly an honour to the honourable service of which, to quote the words of our opening sentence, their ships form not the least important branch.

WHAT TO WEAR.

CHIT-CHAT ON DRESS. BY OUR PARIS CORRESPONDENT.



THE time has arrived when we like to know what the season's colours are to be, and I think I can give my readers some satisfactory details on that point. There is nothing very new, and a decided feeling for artistic tones prevails. Blues have yielded to browns, slate, and such shades, though powder-blue, turquoise, and the new dark "national" are worn, as well as porcelaine. Peacock and sapphire velvets will be more fashionable than any others. "Bronze d'art" is the new brown; it is the shade of French bronzes. "Rose de thé" and coral shades, and a new bluish pink, will be worn for evening. "Candahar" is very popular, as are likewise the terra-cottas. We cannot quite give up Cardinal, but "Lucifer" will in the end supersede it, though a far less decided tone, and has the great drawback of not looking well at night. Only the deepest shades of cream are fashionable, and the brightest of old-gold. Greens and yellows will be blended, and "eau de Nil" and emerald. "Dragon" is a green with a yellow tinge. Heliotropes are over; they had not been out long enough for a lengthy or great success; but "fleur de pêche" is being used for court dresses. "Campagna" is one of the manias of the season; it takes its name from the plains around Rome. Putty or serpentine and holly-green close the list. You cannot do wrong in choosing brown, either as regards fashion or durability; the "bronze d'art" and "mine d'or" (which, as its name implies, has a dash of gold in it) are the newest shades.

Surah and soft silks will be the general wear, and are not expensive; next comes Italian silk, which is in fact a foulard with a satin face; and then the serge silks, which drape well, but if good are costly. They are often made with the two sides of distinct colours. "Gros coté," a satin serge diagonal, is perhaps the most expensive article of this kind.

"Poult de soie" is only used for linings, and is brought out cheap, and we are sorry to say is unsatisfactory, lasting but a short time, and not able to stand any wear-and-tear.

"Satin de Lyons" has given place to "satin merveilleux," very pretty, if durability is no consideration; for it clings to the figure and does not set out at all, and soon gets out of order. Foulards will be a great feature in every variety of toilette, and with a satin face, and printed in some of the new and exquisite designs, they are indeed quite works of art.

Stripes have not superseded brocades and bouquets, but they are newer, especially the *ombré* or shaded stripes, and the Algérienne many-coloured stripes, which are so opposed to good taste.

The richer makes of silk are more beautiful each season, and for court trains and full-dress gowns, tinsel forms most of the brocades, either gold, silver, or steel. Sometimes the whole brocade is in tinsel, sometimes it is merely outlined. The brocades on a delicate cream or peach ground, the design in two tones—say a cream ground, the flowers in light peach and old-gold—are veritable things of beauty. "Velours dentelle" is newer than all these. It has a satin ground, and the design is in the same tone, but carried out in terry, and looks exactly like lace. Satin grounds with the brocade in plush are new, but they flatten quickly. Plush itself is passing away. Velvet and velvet brocades will be worn all the summer.

Shot silks come out each season, but seldom take. Shaded stripes are a new feature of even cottons, but newer still are the designs which are outlined with gold. I do not mean gold colour, but tinsel.

This year's mantles are very richly trimmed, and made of heavy, costly material; but there is nothing very new. The Mother Hubbard *motif*, with its gatherings on shoulders and at back, is the rule. Damask silk, soleil, and an improved Indian cashmere are the best materials for spring wraps. Mantelettes made with tiny sleeves are the favourite shape. The lace is plaited and goffered, and there is more Spanish lace used than other kind. Bead chenille fringe and galons blend with these, and bright-coloured linings are often used. High lace ruffs appear on the newest models, and the back





seams outlined with beads and lace. Large bows of ribbon, tagged, appear at the waist. Black and gold trimmings, and mantles made of black and gold brocade, are worn; cross-bands of satin alternating with gold braid appear on these.

Puffings occasionally are placed below the waist, rendering the figure slim, and the backs of many mantles are cut and joined on the cross, down the centre of the back. Tailor-made jackets fit the figure closely, and have triple collars; tweed in dark brown shades is the favourite material. Occasionally bows of Bayadère silk are added.

Bourdon cord and steel are used on most of the best mantles, either glass-steel beads or metal. Beaded net bands are also worn. The "lily of the valley" fringe is the latest novelty in chenille—an effect produced by pressure of the strands at regular intervals.

Young girls in the evening wear Nun's Cloth, cashmere, and other light materials of wool and silk, trimmed with lace; but married women don very rich brocades. The veritable ball-dresses of tulle are almost covered with flowers, which are applied in broad firm bands across the skirt, round the neck, and wherever they can be introduced; and the idea is further carried out by muffs, made entirely of flowers, and suspended around the neck by a band of flowers. Many dresses have the whole front of flowers, the blossoms set as close as they can be, without foliage. Short dresses are worn only for dancing; long ones on every other occasion; full-banded bodices accompanying most of the short dresses. The pearl galons and fringes, the steel and pearl, and gold and pearl, are something indescribably beautiful as I have seen them on many Parisian dresses,



but they are too costly for ordinary purses. French women seem to make expense a very secondary consideration. They trim their dresses with natural flowers which cost a fortune, and are reviving now for artistic costumes all the most costly modes of the most costly periods of past centuries—Rembrandt hats and falling collars of priceless value. Their gowns, made of gold brocade, seem to have descended to them from days when luxury ruled the kingdom, and revolution and the rule of the people were facts unknown.

The cut of the dresses is the one important point. They must be close-fitting to be *en règle*. Postilion basques are much worn, and square low fronts, sharply pointed; but, whatever the cut, they must fit to perfection. French women, however artistic, do not acknowledge the loose shifting garments which the æsthetics in the art-world have approved of in Great Britain, and often disfigured themselves therewith, by-the-by.

We are to go on wearing gloves of enormous length; indeed, in the fashionable biscuit Suèdes, two skins are occasionally not sufficient to make one pair. The seamless glove has a rival in the Adèle. This has the thumb-piece and the one seam inside the hand brought in a line, which is becoming both to the hand and arm. It is sewn with the elastic *feston*, and is a really good article. The "Biarritz" is an excellent travelling glove. It is buttonless, slipped on directly, and is now sewn in self-colours, and not, as heretofore, in white.

Occasionally the long almond gloves have a ribbon threaded through above the wrist, and finished off with a bow. Sometimes they have plush gauntlets.

Silk gloves and mittens are not out of date, but they are not the acme of fashion. The advantage in them is that they can be had in every shade to match any coloured dress.

There is a new stocking brought out in England, the "Belper," which, though black, does not stain the feet. Ribbed Lisle thread are very good wear, so also are the spun silk. Embroidery is richer on stockings than ever. Many of the Balbriggans have elaborate clocks. But on the best silk stockings the fronts are open-work, with solid stripes between, and these are richly embroidered. Coloured lace fronts on chalk-white stockings are new, and so are coloured fronts of quite a different colour from the stockings.

Spanish lace appears on bonnets, hats, dresses, and mantles, and—quite *entre nous*—a great quantity of Nottingham-made lace of Spanish design is imported into Spain. Very little veritable Spanish lace is used; Lyons and Nottingham supply the market; and besides the lace, the net is sold in extra double width, and is used for dresses and for summer mantles.

The machine-made laces should no longer be called imitation laces; for, truth to tell, many of them have merely the ground-work machine-made, the pattern hand-run. Mechlin and the Point d'Alençon made at Lyons please Parisians most; but this year some of the very finest specimens of old Valenciennes have been brought out at a rather high price, but very exquisite indeed. It will be used on washing dresses. Point de Raguse is another successful rival, and outlined as it is with cordonnet, stands out in bold relief. Point d'Aurillac is a novelty likely to be successful. Straight-edged laces have the preference. Lace is applied very lavishly in cascades and gatherings, intermixed with loops of narrow ribbon. Tea-gowns especially have the fronts almost entirely of lace, and the summer dresses will be trimmed in similar fashion.

The engravings illustrate a few of these new spring fashions—let us commence with the last, and consult the group prepared for a morning walk. The young lady who is trying the effect of a spray of flowers on her friend's hair, wears a "bronze d'art" costume in bège and satin, the skirt and trimmings being of the latter material. The over-dress is fastened with gold buttons, and the lining to the hat is the new shade of gold. The centre figure is in terra-cotta foulard; the pointed trimmings on the bodice and skirt and the added basque are all gathered, for fine gagings are a great feature in spring dress-making. The third figure glitters with steel, for there are steel-tipped feathers on her hat, the lace that outlines her waistcoat is embroidered with steel, so is the lace cascade in front; the tassels that terminate the scarf on her skirt glisten with bright steel.

The next group are all in evening attire, and on music intent. The seated figure is in satin—a dark satin over-dress, and pale broché satin tablier, the lighter colour peeping out in the *crêvés* on the sleeves, and in the lining to the upright collar, and likewise in the train trimmings.

The young lady overlooking the same page wears a soft gown of Nun's Cloth over satin, prettily draped with shaded flowers, the same hue as the satin—for shaded or *ombré* effects have even invaded the floral kingdom this season. And well does this shading look on the front of the next or third dress, which is velvet of the new plum colour, the tablier being shaded satin—gold graduating to brown. The embroidery, which is turned back on the velvet, is that clever imitation of the Carrickmacross lace which the French have introduced, and for which the Parisiennes are showing such a keen appreciation.

The young lady behind the music-stand wears cream Spanish lace over peach satin, the bodice being peach velvet. The lace is crossed and draped on the skirt, and the sleeves entirely of lace are kept in place with satin bands. This artistic gown could be made up successfully in Spanish lace of any colour.

There still remain two figurines in outline—the matron feeding her bird, in a stately dress of dentelle velours and satin, a gathered plastron in front, and the new full basque below the waist. The younger lady, reading as she stands, is wearing a dress combined of Nun's Cloth and satin. With all these toilettes flowers are worn, and those who cannot attain to living ones need not sigh, for the skill of artificial florists is perhaps greater this season than ever, because their best work cannot be detected from the living originals.

MEMORIES OF CHILDHOOD.



H, dear old friend! I come this way
Once more, once more to rest on thee,
While generous branch and leafy spray
A pleasant bower make for me.

It seems as only yesterday
That I was racing down the mead,
With young companions blithe and gay,
To mount thee, brave and bonny steed.

The blackbird pipes as cheerly now,
As gaily flaunts the butterfly,
As when we shook the pliant bough
By madly urging thee on high.

But scattered is that gamesome band
That filled with mirth the flying hours;
One sojourns in a distant land,
One sleeps beneath the daisy flowers.

And others from my ken have past,
But this I feel, where'er they be,
They'll not forget while life shall last
Our swing beneath the chestnut-tree.

JOHN GEO. WATTS.



THE OLD SWING.

"*MEMORIES OF CHILDHOOD*" (*page* 374).

A LESSON IN ARTISAN COOKERY.

IT had long been a very cherished scheme of mine to give my poorer neighbours a few lessons in the art of cooking vegetable soups and other cheap dishes quite within reach of their means, which needed no costly ingredients—only a little accuracy in weighing and measuring the materials, and in observing the proper time to be given to cooking them. But it always seemed to me that it would be difficult to induce my neighbours to come to me to be taught. This difficulty, however, was ultimately surmounted in the following manner:—

There is a Cottage Gardening Society in our parish, which offers prizes for clean houses, well-stocked gardens, flowers in pots, cut flowers, fruit and vegetables; and most of the women had earned substantial prizes during the three years of its existence. The wives of the mason, the blacksmith, and the shoemaker had been especially fortunate with their vegetables.

It occurred to me that it would be a capital plan if I were to offer prizes for vegetable soup, to be judged on the day of the flower-show along with the flowers, fruit, and vegetables. Accordingly, when our report and rules for the next year were to be printed, I inserted a list of prizes for soup, the highest prize being 7s. 6d. It was not long before I heard that the new prizes were being much talked about, and that several women resolved to compete for them; but they wondered how the soup was to be made. Was it to consist of vegetables and water only, and were they to put a little of every vegetable in the garden into it? Their ideas of cookery were the most rudimentary and simple.

I left the subject to work in their minds, and when the desirability of winning 7s. 6d. had been discussed for a couple of months, I proposed to give lessons in making soup to any of our members who might wish to learn. The blacksmith's wife was eager to attend my class; she kept me in mind of my promise, and stirred up her friends in the village and parish at large, till at length I found I was likely to give my first lesson to a class of nineteen young women and girls, all anxious to compete for the prize.

As our flower-show was to take place the last week in July, I decided upon giving the lesson early in the month, since it would not do to let too long a time elapse between the lesson and the judging. The instructions ought to be fresh in the pupils' memories.

I had a nice little grate put into the kitchen of an empty cottage, and I laid in coal and the necessary ingredients for two kinds of soup. I was at the cottage on the day before our lesson to receive the messengers who were arriving with our stores, causing much interest and excitement in the village, especially among the little boys. No rehearsal was ever carried out with more painstaking anxiety than mine, as, with my maid to assist me, I spent the afternoon in making the two soups I had decided upon to form the staple of our first lesson.

Great interest was displayed in our doings. Grown people walked lingeringly past the window, too respectful to pause altogether to stare at the novel sight, yet determined to see as much of it as they could, while my little enemies, the boys, flattened their noses against the panes, or pressed in at the door to watch what I was doing. I was not disturbed by all this observation, however; the experiment was too absorbing and important to admit of my thinking of other things.

At three o'clock next day the fire was burning clearly and brightly; the materials for our cookery were laid out upon a table in the centre of the room; forms were ranged along the walls, and my maid, Annie, and I stood with our aprons on, awaiting the arrival of our first pupil. Mrs. Dennehy, the blacksmith's wife, who had first seen the desirability of trying to earn the prize, was the earliest to appear.

"There's a whean o' them coming up the street, miss," said she: "there's Fanny Brown, an' young 'Essie, an' Mrs. McBeth from Clooney, an' Nancy Mahaffy from Letterbratt."

"But your next-door neighbour, Mrs. Dennehy, and the other women from Letterbratt, are not they coming?"

"I heered them sayin' they'd come, miss; but I thought I'd be too long if I waited on them. I was lazy to keep you waiting."

"Here they are now," cried Annie, who had been at the door to look out; and we soon welcomed fourteen women.

"We'll begin at once," said I, "for the dried-pea-soup will take three hours to make properly. I hope you are willing to stay with me until half-past six o'clock."

They all replied that they had made arrangements to stay. One woman had got a neighbour to promise to prepare her husband's supper; another had a little daughter at home who was old enough to fill her place; a third thought her husband would not mind waiting a little for once.

"He will be rewarded for waiting if you learn to make the soups I am going to show you; they are so good that I am sure he will ask you to give them to him often. Don't you all buy bacon sometimes?"

"Very often," replied some. "About twice a week," said others.

"And how do you prepare it generally?"

"We just fry a wee bit in the pan, an' it does for a taste to the potatoes."

"How much do you usually get at a time?"

"About two ounces."

"Why, that is precisely the quantity I am about to

use in the pea-soup ; and it will both taste nicer and go further than if you were to eat it plain."

Our kettle came to the boil as I made the above remark. I took it off the fire and measured two quarts of boiling water into a large saucepan. I then put a pint of dried split-peas and two ounces of bacon cut in small pieces into the water, and set the saucepan upon the fire. Annie stood near with a spoon in her hand, and lifting the lid of the saucepan, gave the mess a good stir every few minutes to prevent its burning.

"Now," said I, "our pea-soup must boil for an hour and a half before we do anything more to it—an occasional stir is all it will require. See, I place my watch on the table, for it is most important to be particular about time in cooking. I think you all have clocks in your houses?"

"We have clocks surely, but we wouldna be bothered lookin' at them," said Nancy Mahaffy, my oldest pupil.

"Troth, Nancy, you would be glad enough to be bothered if it was a thing you were expectin' the prize," retorted another woman ; and there was a general laugh at Nancy's expense.

"While the pea-soup is boiling," I continued, "we shall have ample time to make some sago-soup, which is very nice, very cheap, and can be made in an hour and a half. When the men taste *it*, I am quite sure they will insist on its being made for them very often."

There was a laugh at this view of the question, and the women joked one another, the faults and virtues of their husbands, sons, and brothers being very freely commented upon. One man was reported to be very careless what he got to eat if only the children were kept quiet while he was in the house. Another was "that fine an' particular you couldna satisfy him." Nancy Mahaffy asserted that *her* old man knew better than to give trouble about "his meat."

"Poor old crathure!" cried a neighbour, "it isn't much trouble you take about his meat, Nancy."

"Well, I should like to think the men had a comfortable, warm dinner after working in the cold and wet. Now for the sago-soup. You put four ounces of sago into a saucepan with a quart of cold water, an ounce of bacon, a little pepper and salt, and a teaspoonful of celery-seed tied up in a piece of muslin. Bring the saucepan, Annie, and let us measure the quart of cold water before their eyes. Set it on the fire, and let it come to the boil."

Mrs. Dennehy, who watched our operations very closely, observed that they all had celery-seed in their gardens, so that the seasoning would be easy to get. She called upon the others to remark that the sago was put on in *cold* water, and the peas in *boiling* water.

"The sago is boiling now, miss," said Annie.

"It must boil for an hour before we do anything further to it, and we must stir it very often while it is boiling."

The pupils watched while Annie and I peeled and cut up six large onions in very thin round rings, and then chopped them very fine. These we laid aside to be added to the sago-soup when it should have boiled for an hour, and began to peel six more large onions for the pea-soup when its hour and a half should have expired. We stopped in our work every few minutes to run to the fire and give our two saucepans a stir.

I had by this time repeated the receipts so often—going over and over their directions in the plainest language—that I was quite hoarse. Some of the young girls had learnt them by heart, but were too shy to repeat them for the benefit of their companions as I requested.

At length the sago-soup had boiled for an hour, and while it was boiling fast we threw in the fine-chopped onions, which we stirred round, and left to boil for eight minutes. Our next proceeding was to mix a table-spoonful of flour in a basin with three table-spoonfuls of cold water, to which we added a little of the boiling soup so as to blend it properly. We then added it to the soup in the saucepan, gave all a last stir, took out the remains of the bacon and the little bag of celery-seed, and poured the soup into the nineteen little mugs which I had arranged upon the table in readiness. A slice of bread had been toasted and cut into very small dice. We put a few pieces of toast into each of the mugs before handing them to the class.

"Beautiful!" cried Mrs. Dennehy, as she tasted hers.

"It's just lovely, miss," smiled little Fanny Brown.

"Dear, dear, but it's the darling nourishment!" said Nancy Mahaffy.

"Won't you make it for your old man, then, Nancy?" asked I, highly pleased.

The seasonable refreshment cheered the class, who had, I fancied, seemed a little tired, and the remainder of our task was accomplished easily. At the expiration of the hour and a half, I had thrown the six onions into the boiling pea-soup. When the class had finished tasting the sago-soup, I found that the pea-soup had still an hour to boil. It was exactly half-past five. At half-past six we took the onions out of the pea-soup (they had fallen into halves and quarters, and were as tender as marrow) and set them aside while we strained the peas through a colander, mashing them with a spoon in the water they had been boiled in, so that they ran through like a thick soup. When we had strained it, we returned it to the saucepan. We then mixed a large table-spoonful of flour in three table-spoonfuls of cold water, and when the soup boiled again we mixed it with some of the boiling soup, then with the whole ; and having cut the soft onions into tiny morsels, we added them and little bits of toast, and served as before in the nineteen mugs, which Mrs. Dennehy had washed for us.

"Darling" and "beautiful" were the faintest expressions of approval applied to it, and the class unanimously expressed their intention of making it for the show, Mrs. Dennehy laughingly assuring her companions that she meant to distance them all, and win the highest prize.

LETITIA MCCLINTOCK.



LOVE'S-ACRE.

BEFORE the spring is well abreak
The cherries there are blooming,
The hawthorn marvels half awake,
Its starry coat assuming;
Japonica the garden hath,
And in the healthy meadows
Sweet, the shy daisy skirts the path
And glorifies the shadows.

About the hedge the "devil's-rope"
Forbears its deadly creeping,
And like the growth of golden hope
The buttercups are heaping;
The sliding efts atop the pool
Are often caught a-breathing,
And often have I found the mole
His stealthy body sheathing.

And why all this? Oh, hear the thrush
On yonder oak a-trilling,
He'll tell thee of a darling—hush!
His little throat is swelling:
"'To Luluah' my song is named,
Can ye its wording render?
What, no! They are not to be blamed,
Mine old friend, true and tender.

"They have not watched, as you and I,
A patient time together,
To hear a footstep by-and-by,
And thrill to see a feather;
They know a thousand flowers flame
By lawn and dene and dingle,
But one, the fairest of them, fame
Leaves unobserved and single."

B. C.

THE GATHERER.

A New Tap for Effervescing Liquids.

It frequently happens that aërated water, champagne, and other effervescing beverages are prescribed in small quantities in illness. As the doses, though small, have often to be repeated, it would become a matter of unnecessary expense to open a bottle each time, for, as a rule, a bottle once opened, the liquid which it contains speedily becomes flat. To meet a requirement of the kind here roughly indicated is the object of the very ingenious apparatus represented in the woodcut. A hollow corkscrew, mounted on a small stand, is so contrived that a little outflow-tube may readily be opened on applying a slight pressure to a lever. The corkscrew passes through the cork of the inverted bottle; the gas in the bottle presses out the liquid when the lever is pushed down, but the delivery ceases the moment the lever is released. At the same time the gas cannot escape until all the liquid has been drawn off, so that the beverage retains its effervescent qualities till the last, no matter how slowly it may be used. This appliance is also handy, inasmuch as it saves the trouble and waste that often attend the uncorking of bottled liquids in the ordinary manner. Some kind of light frame to prevent the bottle from toppling over seems to us the only thing the device wants to make it practically perfect.



Electricity and Wool-Spinning.

Owing to the large quantities of frictional electricity generated by the rubbing of wool upon itself or the machinery while it is being manufactured, the spinning is attended with difficulty, especially in dry weather, for the electricity causes the yarn to become frowsy and catch at the machine, thereby tending to break the threads. In fact, so serious is this impediment that a wool-mill sent out to America a few years ago from Bradford could not be got to work satisfactorily except during the spring thaws. Experience has taught our wool-spinners that moistening the bobbins of wool relieves them of their electric charge, and hence there are large damp cellars attached to factories, where the bobbins are stored for months. This plan, however, represents a waste of time and a locking-up of capital, so that the new method introduced by Mr. E. Bright has much to recommend it. This consists in putting the bobbins into a chamber exhausted of air, till the rare atmosphere there becomes conducting and allows the electricity to discharge itself from the bobbins. The bobbins are run in on a truck, and the chamber, which is of iron, is connected to the earth, so that the discharged electricity may dissipate itself in the ground. The rarefaction of the air is effected by an air-pump, and a few minutes of exposure to it is equivalent to several months' exposure to damp air in a cellar at the ordinary atmospheric pressure. A modification of the apparatus can be also applied to the carding of wool.

A Growing Industry.

In Montserrat, a small island of the Antilles group, one may any day see a pleasant picture that helps one to realise what a blessing emancipation was to the poor creatures who by its beneficent operations were freed from slavery. During the greater part of last century, sugar was the staple production of the island, and the labour employed on the plantations was slave-labour. In the height of the then prosperity of Montserrat the number of slaves was as enormous as 10,000, and the annual yield of sugar 2,700 hogsheads. The conquest of Trinidad and Demarara, however, brought these countries into effective competition with Montserrat to such an extent, that the sugar cultivation gradually dwindled into comparative insignificance. But of late years an entirely new industry has been created in this beautiful and salubrious island, an industry that has been developed with giant strides. We refer to the lime-tree plantations, from which the lime-fruit juice and cordials are now prepared in such immense quantities for use in the navy, in the sick-room, and as refreshing beverages. Though the first lime orchards were planted so recently as 1852, the plantations cover more than 600 acres, and contain upwards of 120,000 trees. These are planted fifteen feet apart, and the high road passes through them for a distance of over two miles. The lime harvest is heaviest from January to September, but a yield may be had all the year round. The fruit is taken to the factories, where it is sliced by water-power, and afterwards squeezed until all the juice has been expressed. The juice of the finest fruit is at once "headed up" in casks so that it may not be exposed to the air; that of inferior fruit is boiled down for the citric acid makers. The negroes are the chief labourers and are in a very flourishing condition. They most of them own land, cattle, sheep; many of them grow the sugar-cane and vegetables on their own account; and they are more independent than many European peasants. They will not work more than nine hours a day, or do more than a certain amount in a day, or do another man's work. They are light-hearted and good-tempered, and are so fond of working in gangs, so

strongly imbued with the sociable spirit, that it is difficult to get them to do anything alone. This is the pleasant picture we spoke of at the beginning; and it is impossible to find a stronger contrast than that of the utterly heartless and degraded misery of the wretched beings who existed in the bad old days of slavery, and that bright, sunny, industrious life among the lime plantations of Montserrat.

A Magnetic Thermometer.

Sir William Thomson, the distinguished physicist, has invented a very delicate thermometer, or rather, thermoscope, based on the property possessed by magnets of losing their strength when warmed. A tiny astatic magnet or needle, weighing a few grains, is delicately suspended by a silk fibre at right angles to the similar poles of two other magnets placed one on each side of it along the magnetic meridian, and a very light mirror, about the size of a sixpence, is attached to it. A beam of light is then reflected from this mirror to a graduated scale placed about a yard from the mirror, on which it makes a round patch of light, illuminating the degree of the scale on which it falls. The magnets are arranged to cause the needle to take up a position which throws the light-spot on the zero of the scale when the temperature is zero, and any rise of temperature above or below that is indicated by a divergence of the light-spot from zero along the scale in one direction or the other. If there is an increase of temperature the needle will be less powerfully attracted by the fixed magnets than before, and move away from them slightly; if a decrease, it will move towards them.

New Telephones.

Probably the greatest feat in telephony yet accomplished is the recent transmission of speech by the Herz telephone over a French telegraph line 800 miles long. The new apparatus of Dr. Cornelius Herz consists of a microphone transmitter with contacts of iron pyrites instead of carbon, and a speaking condenser of the kind described in the last number of the GATHERER. This instrument, it will be remembered, consists of sheets of tinfoil insulated from each other, and connected alternately to two separate poles or terminals, T T, after the manner shown in Fig. 1.

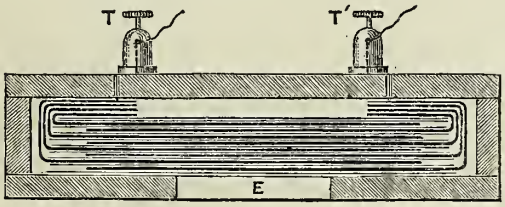


FIG. 1.

These terminals are connected in circuit with the line, and the telephonic currents in charging the condenser cause it to emit articulate speech, which is plainly heard on holding the ear at the orifice E. Fig. 2 shows the actual form of the receiver. Another kind of telephone receiver, recently invented by Mr. W. H. Preece, chief electrician of the Postal Telegraphs, is illustrated by Fig. 3, where P is a spiral of platinum wire, connected in circuit with a voltaic battery, B, and a wheel-break or revolving current interrupter, W. The spiral is enclosed in a box, *a*, *b*, *c*, *d*, blackened in the inside so as to absorb and give out heat. Now when the break is rotated, pulses of current are sent through the spiral P, which is therefore subjected to heats and colds, and the air surrounding it in the box to expansions and contractions, which are heard as sound. If the number of breaks be sufficiently great per second, the air gives out a musical tone; and, moreover, if the wheel-break be replaced by a speaking microphone, and four bichromate of potash

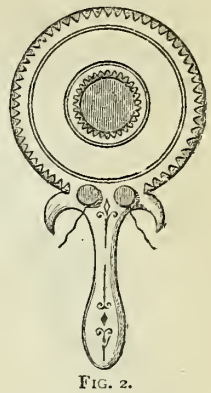


FIG. 2.

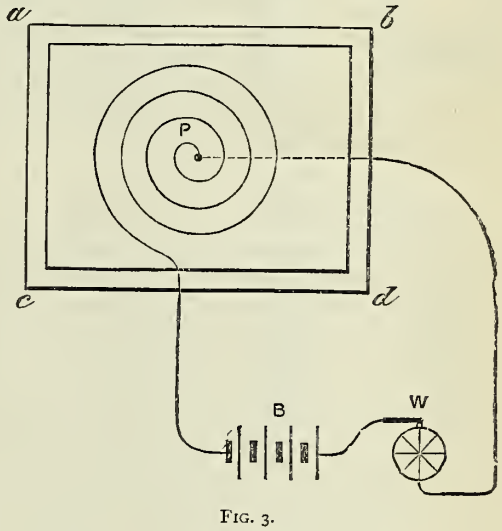


FIG. 3.

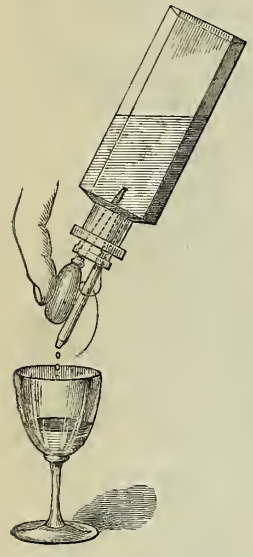
cells be employed to yield the current, distinct articulation will be delivered by the vibrating air. This contrivance of Mr. Preece is undoubtedly the simplest form of telephone yet invented.

Liquid Ozone.

One of the most recent triumphs of chemical science is the liquefaction of ozone, that peculiar form of oxygen. A reservoir containing oxygen at a temperature of 9·4° below zero (Fahr.) was charged with ozone, and subjected to hydraulic pressure applied by means of a column of mercury. The gas immediately turned to an azure-blue colour, which deepened in shade as the pressure increased. The ozone liquefied under a pressure of 75 atmospheres, while 300 atmospheres are necessary to liquefy pure oxygen. The curious fact also came out that ozone is an explosive gas, for unless carefully and slowly compressed at a low temperature it explodes with a yellow flame. Its ethereal blue tint is very beautiful, and probably accounts for the colour of the sky.

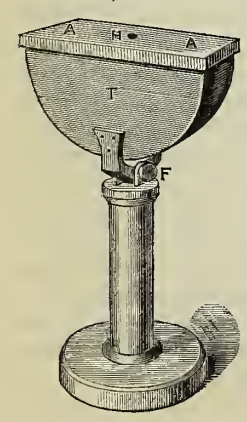
A Drop Attachment for Bottles.

Only those who have tried to get liquid out of a bottle drop by drop, and have failed to do so, or succeeding after several efforts, have lost temper or patience, or both, can appreciate fully the usefulness of the ingenious device represented in the annexed woodcut. It consists of a tube secured in the stopper and furnished with a rubber air-bulb for blowing air into the bottle, and another tube likewise inserted in the stopper, through which the liquid is delivered. By pressing the bulb more or less strongly, the liquid is made to run either by the drop or more rapidly if necessary. It will be seen that this appliance is calculated not only to save time and trouble, but also to enable timid or nervous persons to administer drugs in the minutest quantities with confidence.



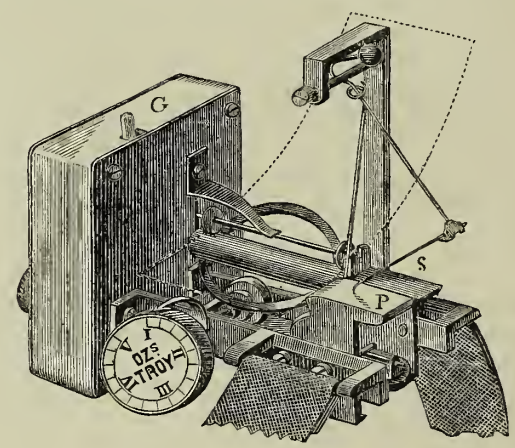
Recording Sunshine by Photography.

The best plan hitherto devised for registering the intensity and duration of sunshine, is probably that of Mr. Campbell, in which a glass ball focusses the sunshine on a moving strip of paper, and chars it more or less according to its strength, thus leaving a brown track on the paper. A still better plan, at all events for photographers, has however just been invented by Captain Abney, R.E. The instrument, which is shown in the figure, consists of a semi-cylindrical box, T, having a lid, A, A, which is perforated at its centre with a hole, H, one-tenth of an inch in diameter. A band of sensitive photographic paper is made to line the curve of the box in the interior, the centre of the paper being under the hole in the cover. The instrument is then ready for work, and it has merely to be placed on a window-sill or other convenient site facing the south, with the length of the lid lying east and west, as determined by sun-dial or compass. Once ascertained, this position can be marked to save time in future. Another adjustment is to make the plane passing through the hole in the lid and the centre line of the paper to pass through the path of the sun. To effect this, the box should be caused to throw a shadow on a piece of white paper placed behind it, and gradually inclined on the hinge, F, till the shadow of the lid is just cut off by the box itself. When this takes place, the sun, the hole, and the central line of the paper inside will be in the same plane, and the sun will print its track along the middle of the sensitive paper. A small lens, of not more than $\frac{1}{5}$-inch aperture, helps the action of the instrument by giving a finer line on the paper; and such a lens need not cost more than sixpence. By using two holes, the sunshine of the morning and evening can be observed apart from that during the day. The proper kind of paper to use is the ready-sensitised, which will keep for months, and if a little discoloured will answer the purpose just as well. It has only to be fixed by hyposulphite and washed. A scale of hours may also be added to the paper, by taking a sheet of glass coated with non-actinic varnish, scratching the scale upon it, and then photographing it on the paper by means of diffused light.



A Pocket Pulse-Writer.

The condition of the pulse has from the earliest times been held as a valuable aid to the diagnosis of disease; but until the sphygmograph, or pulse-writer, was invented, the pulse was only read by the finger of the doctor, which varies in sense with different men and at different times. Moreover, it can at best only tell whether the pulse be soft or hard, quick or slow, jerky or languid, regular or irregular; it cannot analyse the beats and detect any variation in each of the elements which make up the total movement. The pulse-writer, on the other hand, enables the pulse to record its own movement, for all to see, so that the physician can distinguish at a glance where it differs from the healthy or normal pulse. Hitherto this most useful instrument has been little used, except in hospitals, owing to its cumbrous nature. The same objection does not apply to the pocket sphygmograph of Dr. Dudgeon, which we illustrate herewith. This apparatus is only two and a half inches long by two inches wide; it weighs only four ounces, and is therefore well adapted for private practice. The movement of the pulse is taken up by an adjustable spring pressed upon it, and communicated by a system of



delicate levers to the stylus S, which traces a line upon a band of smoked paper, P, kept running by a small clockwork, G. A dial indicates the pressure put upon the spring, which may amount to five ounces. The smoked paper runs through the instrument in ten seconds, so that the number of pulse-beats per minute can be reckoned by multiplying the number on the tracing by six. The patient's name, and disease, the date, and so on, may also be scratched upon the paper, which, on being dipped in a quick-drying varnish, can be kept for reference and comparison. This little apparatus magnifies the movement of the artery no less than fifty times. It can be applied to the patient in any posture, and gives its autograph of the pulse almost as quickly as a physician can feel it with his finger.

Safe Gigs and Carts.

A new way of mounting two-wheeled carriages has recently been designed, which will be interesting to farmers and other owners of horses. This consists in dispensing with the common axle running under the bottom of the vehicle from one side to the other, and making each wheel turn round a short axle of its own, between two parallel bars, as shown at *a a* in Fig. 1, which represents a ground-plan of a spring-cart. The

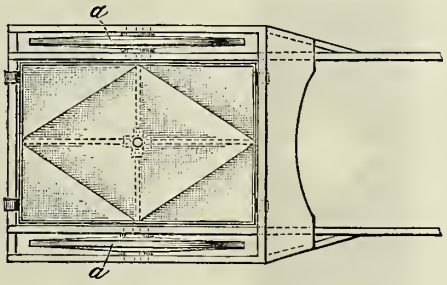


FIG. 1.

chief advantage of this construction is that the body of the vehicle can be swung on the springs much lower than is usual, and the centre of gravity being thus depressed to near the middle of the wheels, there

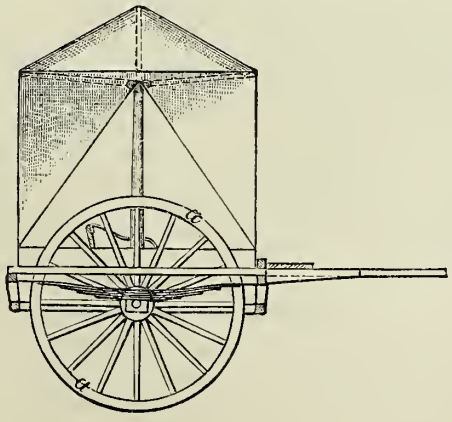
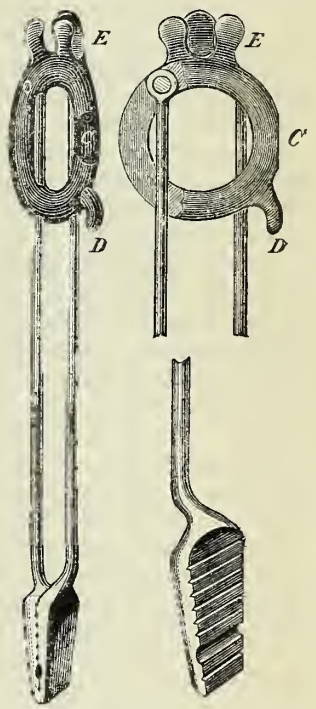


FIG. 2.

is less danger of an upset. Moreover, this arrangement, shown in Fig. 2, is not so trying to the horse in going up or down a hill, and at the same time a low seat and large wheels are obtainable. The outer shaft is also contrived to fend aside the wheels of other vehicles in an accidental collision, and the inventor has added a novel shade for rain and sunshine.

An Ingenious Pair of Tongs.

The tongs are usually devoted to one kind of work, but it has occurred to a recent inventor that there is no reason why they should not be made still further serviceable for household purposes, and he has accordingly devised a pair which combine several useful features. A reference to the accompanying engraving will show in what the various improvements consist. It will be seen that a ring forms the head of the tongs, and that it receives the fixed and the movable leg. It has besides two projections, of which the one at the top, E, is employed as a plate-lifter, and that towards the bottom, D, for lifting pots, kettles, stove-covers. In addition to these features, there is on one side a flattened surface, C, which is to be used as a hammer-face. The inner surface of each jaw is grooved so as to secure a tighter grip upon the article to be lifted, and being of an angular and oblong shape, either may be used to lift stove-covers and the like.



The Telephotograph.

Another step towards the solution of the problem, how to send a picture or an image of an object to a distant place by means of electricity, has just been made by Mr. Shellford Bidwell. This apparatus is a combination of the Bakewell copying telegraph and the selenium cell which Professor Graham Bell has so ingeniously applied to the transmission of speech by telephone along a beam of light. A reference to Fig. 1 will help to explain the process. In this figure, P is a marking stylus of platinum, with its point resting on a sheet of paper laid on a metal tablet, M. The stylus is connected through a set of electric resistance coils to the positive pole of a voltaic battery, B; and the tablet is connected through a galvanometer, G, to the negative pole of the same battery. There is thus a complete circuit for the current, which flows from the stylus through the paper to the tablet and galvanometer. Now the paper is soaked in a solution

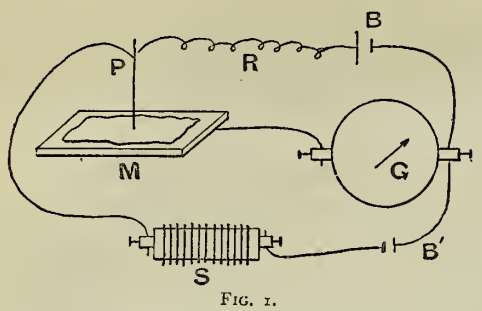


FIG. 1.

of iodide of potassium similar to that used in the chemical telegraph of Bain, and the result is that the current of electricity in passing through the paper decomposes the solution and liberates the iodine, which stains the paper brown. If then the stylus is drawn across the paper it will leave a brown trail behind it, so long as the current passes. But should the current be stopped by any cause, this trail will cease and the paper will retain its original whiteness. It is the aim of Mr. Bidwell, therefore, to make the luminous image which he wishes to transmit stop the current in such a way that the image itself will be delineated by the breaks in the marking of the stylus, and he does this by means of the second battery B′, and the selenium cell S. This cell is composed of two fine spiral wires, wound very near together, and filled in between with crystalline selenium. It is connected in circuit with the stylus P, and the negative pole of the battery B′. Now it is evident that the current from the second battery tends to neutralise the current from the first in its decomposing action on the paper, and if strong enough will neutralise it altogether. Mr. Bidwell focusses a strong light or image on the cell S, then

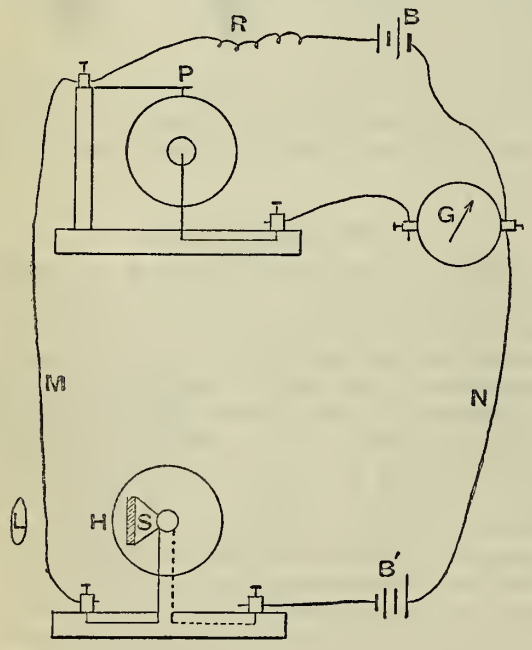


FIG. 2.

adjusts the resistance R, until the two currents exactly neutralise one another. Under these conditions the stylus will make no marks, but if the intensity of the light on the selenium diminishes, the resistance of the cell will increase, the current from B′ will therefore be weakened, and the consequence will be that the current from B will predominate in the stylus and make a mark on the paper. The galvanometer serves to indicate the adjustment of the currents. In the telephotograph this principle is carried out according to Fig. 2, where P is the stylus, as before, tracing a screw-line on a revolving barrel wrapped with prepared paper, and connected to the marking battery B, through the galvanometer G. The transmitter consists of a barrel, H, enclosing a selenium cell, S, connected to the battery B′, and stylus P. A fine pin-hole is drilled in the side of the barrel, which is revolved synchronously with the barrel of the receiver carrying the paper, and at every revolution the pin-hole crosses the surface of the cell in a spiral path. If now a luminous image of an object be focussed by the lens L, on the barrel, just opposite the selenium cell, the pin-hole crossing the cell will let in a ray of light every time it crosses the image. In this way the pin-hole will trace out the shape of the image in parallel lines on the cell. But if the two batteries are so adjusted that when the ray of light falls on the cell the stylus will cease to mark, it follows that the shape of the image will be delineated

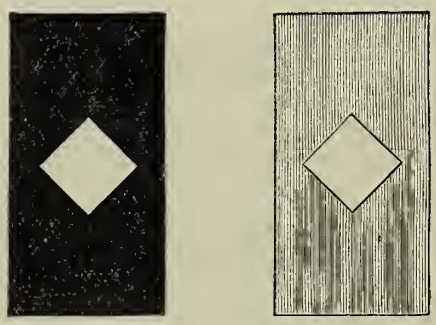


FIG. 3.

by the breaks in the parallel lines drawn on the paper by the stylus. Fig. 3 represents a diamond pattern actually sent by the telephotograph of Mr. Bidwell. The luminous image focussed on the cell of the transmitter is seen on the left, and the picture of it outlined by breaks in the chemical lines drawn on the receiver is shown on the right hand. With more delicate paper and perfected apparatus, Mr. Bidwell hopes to delineate light and shade in the image by fainter and deeper lines on the paper. The apparatus is only in its experimental stage yet; but the wires M and N in Fig. 2 are supposed to represent a telegraph line.

Inlaying Wood by Pressure.

A method of inlaying wood by pressure has been recently introduced. It consists in glueing a veneer of the wood to be inlaid over the common wood, and placing a zinc "stencil" plate with the pattern cut out of it over the veneer, then subjecting the whole to the softening action of steam and the pressure of two powerful cast-iron rollers. These rollers crush the zinc stencil into the veneer, and the underlying veneer

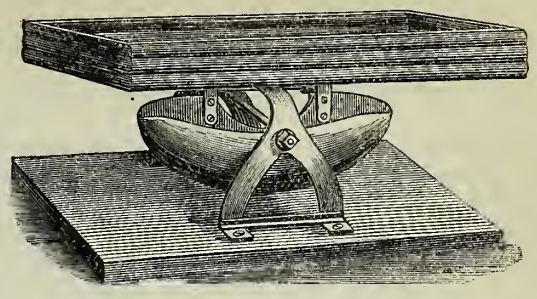
into the common wood. The stencil is then withdrawn, and the embedded portion of the veneer is planed down till the inlaid surface is perfectly smooth and even.

The Tide-Predictor.

Sir William Thomson has in recent years turned his inventive genius and great scientific knowledge to the improvement of the instruments of navigation. As Sir George Nares said recently, he has bettered all the "three L's" of the sailor—namely, the lead, the log, and the look-out. His patent compass is now recognised to be the compass of the future, his pressure lead and sounding apparatus by pianoforte wire is being introduced into many mail steamers and men-of-war, while his mode of making light-houses flash their distinctive names according to the Morse telegraphic code is also proving its superior worth. But Sir William has besides turned his attention to the measurement of the tides, an important matter for an insular and seafaring nation like ours, and has invented three most ingenious apparatus for the purpose. These are the Tide-gauge, the Tidal Harmonic Analyser, and the Tide-predictor. The Tide-gauge registers the actual height of the sea-level, by means of a float actuating a pencil marking a running band of paper; the Harmonic Analyser substitutes brass-work for human brains in calculating out the different elements which compose the whole tidal rise and fall; while the Tide-predictor, as its name implies, does nothing less than predict for any particular port, and for any future year, not merely the times of high and low water, but the position of the water-level at any instant of any day of the year. The action of the instrument is to draw curves of the tides at that port; one year's tides being, in the latest form devised, run off in twenty-four minutes. The elements of the tide at the port in question furnished by the Harmonic Analyser are the data upon which the Predictor operates. The details of the apparatus are too complicated for description here; but we may mention that the different elements of the tide are combined by means of a fine steel wire or cord passing round several pulleys corresponding to these elements. One of these Predictors has already done good service in predicting the tides for the Indian ports as given in the volume of Tide Tables for 1881.

A Self-adjusting Berth.

Among the multitudes who now-a-days "go down to the sea in ships" and "do business in great waters," there are comparatively few who do not in some shape or form suffer considerable discomfort, while there are many who look forward to a sea-voyage with absolute misgiving and dread. It is the object of the apparatus represented in the woodcut to make this kind of travelling less unpleasant than it is. It consists of a berth so constructed as to adjust itself easily to the pitching or rolling of the vessel. The berth is of the same size as the ordinary berth now in use, and is counterbalanced by a crescent-shaped weight rigidly



secured to the under-side, the whole being so swung on a universal joint as to preserve a level surface throughout the various motions to which the ship may be subjected. As the action of the berth is further regulated by rubber bands, sudden or jerky movements and their consequences (frequently of the most disagreeable kind) are avoided. Invalids and those who suffer from sea-sickness will appreciate the value of an appliance that enables them to lie at ease in the roughest weather. Of course this contrivance is only effective against sea-sickness while the traveller is in a recumbent position, but even to this extent the invention appears to offer a relief for which many would be grateful.

Private Time-Signals.

A simple device has been introduced by a firm of telegraph engineers for enabling all the telegraph offices, and the offices of private firms in connection with these offices, to hear the Greenwich time-signal. Hitherto, the passage of this signal along the wires could only be noted by keeping a sharp look-out on the telegraph instruments to see the deflection of the needle which it caused; but the inventors have made the signal announce itself by the ringing of an electric bell. This is effected by adding a metal contact to the "stops" of the needle in such a manner that when the needle strikes the stops it completes a local or special circuit, in which are included a battery and electric bell. The result is that the signal causes the electric bell to ring. The arrangement is designed so that it can readily be disconnected when not required for the indication of the time-signal.

PRIZE ANSWERS TO ACROSTICS.

We are now able to announce that the Prize of TWO GUINEAS *offered for the best rhymed verse solutions of the Six Prize Acrostics recently given in our pages, has been awarded to* CHARLOTTE P. MITCHELL, *Worcester. The following are specially commended:—W. Maddison, Bedlington, Northumberland; Cornelius Down, Brighton; Jean Macmillan Brown, St. Andrews, N.B.; and Albert Jarrett, Manchester. We hope to place the Prize Solutions before our readers, space permitting, in the course of the present volume.*

The Regulations and other particulars of the New Series of Prize Competitions open to Readers of this Magazine will be found on the next page.

NEW SERIES OF PRIZES.

THE very successful results attending the Prize scheme announced in the previous volume have more than justified the Editor in the conviction that a large number of his readers "would highly value, as an addition to the already numerous advantages of CASSELL'S FAMILY MAGAZINE, some new department of interest, by which opportunities for useful or recreative employment of a competitive character might be placed in their hands." It has also confirmed him in the belief, which he then expressed, "that a Competitive or Prize scheme, to be in accordance with the high character of the Magazine, should have for its end some practical good far beyond the mere exercise of smartness and ingenuity, and the excitement of a competition for the award's sake alone."

The Editor is glad, therefore, to be able to state that the Proprietors of the Magazine have decided to continue a scheme which has proved so useful and acceptable, and he accordingly has the pleasure to announce to his readers the nature and conditions of the following Prizes :—

I.—A PRIZE of £10 will be awarded for the best PRACTICAL PAPER on *True Economies in Household Management.* The length of the Paper must be equal to at least five and not more than six pages of the MAGAZINE, which may be divided into two chapters, at the discretion of the competitor. All MSS. must be properly authenticated, and sent to the Editor not later than July 1st, 1881.

II.—A PRIZE of £5 will be awarded for the best set of SIX ORIGINAL CHESS PROBLEMS. Competitors must send in their work, properly authenticated, *together with the* KEYS *or* SOLUTIONS *of the Problems*, to the Editor, not later than September 1st, 1881.

III.—A PRIZE of £5 will be awarded for the best MUSICAL SETTING of the following words :—

THE ARROW AND THE SONG.

"I shot an arrow into the air,
It fell to earth, I knew not where ;
For, so swiftly it flew, the sight
Could not follow it in its flight.

"I breathed a song into the air,
It fell to earth, I knew not where ;
For, who has sight so keen and strong,
That it can follow the flight of song ?

"Long, long afterward, in an oak,
I found the arrow, still unbroke ;
And the song, from beginning to end,
I found again in the heart of a friend."

LONGFELLOW.

The Song may be arranged for any *Voice*, with suitable *Pianoforte Accompaniment.* Competitors must send in their MSS., properly authenticated, to the Editor not later than November 1st, 1881.

IV.—A PRIZE of £5 will be awarded for the best POEM on *Family Affection*, or any subject directly bearing thereon, to be in rhymed verse of any metre the Candidate may select, and the length not to exceed sixty lines. All Poems must be properly authenticated, and sent to the Editor not later than February 1st, 1882.

GENERAL RULES.

1. Every reader of the MAGAZINE is eligible to compete for all or any of the Prizes offered.

2. The Editor cannot undertake to answer inquiries having reference to the treatment in any detail of the above subjects. *The descriptions given under each head are sufficient for the purposes of the competition, and the rest is left to the judgment and discretion of the Competitors.*

3. Each MS. must have inscribed on it, or otherwise securely attached to it, the name and postal address of the author, together with a declaration that *the work is original, and entirely the sender's own*, to be signed by the author and countersigned by some other trustworthy person—*i.e.*, a magistrate, minister of religion, or householder—with the postal address in both cases.

4. In all cases, the copyright of the successful works will become the property of Messrs. CASSELL, PETTER, GALPIN & Co., the Publishers of this Magazine.

5. In cases where the two best works in any one competition are of equal merit, the Prize may be divided at the discretion of the Editor.

6. The Editor will not be responsible for loss or miscarriage of any work during transmission, and all letters or packets must be *prepaid.* The Editor cannot undertake to return unsuccessful MSS.—copies should therefore be retained by the senders.

7. Every MS. must be sent before the date named above as the latest day in each section, addressed—

THE EDITOR OF CASSELL'S FAMILY MAGAZINE,
LA BELLE SAUVAGE YARD, LONDON, E.C.

THE PROBATION OF DOROTHY TRAVERS.

By the Author of "In a Minor Key."

CHAPTER THE TWENTY-FIRST.

CASTLES IN THE AIR.



CHRISTMAS DAY, with all its festivities, has come and gone. Ferdie has had his tree loaded with toys for him, and is languidly happy with all his new possessions. The frost has broken up, and skating has given way to hunting; and the next thing to occupy the thoughts of the Wrangham people is the prospective gaiety in January.

Geoffrey is gone away, much to Lady Travers' and Dolly's relief. Since she has received Harry's letter, and more especially since that snowy walk, the latter has avoided him. Together they had intended to light up Ferdie's tree, but at the last moment Dolly absented herself, and persuaded Lou to take her place, and since then she has barely spoken to him, except to say good-bye. They have all been so busy that Mr. Ingram, much as he would have liked her company, has not noticed anything particular in her withdrawal, except to mark, with more amusement than disapproval, that wherever she is, there too is Harry Cartwright at her side. The young man has taken a sudden and violent fancy to his cousin, as he calls her, and under that safe sheltering name has constituted himself, for the last four days, her shadow, having arrived, by a rapid process of development, to the conclusion that he is hopelessly and desperately in love. These sentiments are by no means discouraged by his mother, who would willingly see her wild son settle down into the bonds of matrimony, and who is perfectly aware that Dolly is a desirable wife in every sense of the word. The girl herself thinks nothing at all of the matter. Both the Cartwright boys are to her as cousins, and just now she finds Harry's constant companionship very useful in warding off any *tête-à-têtes* between herself and Geoffrey. The latter has bidden her and Ferdie a cheerful farewell, comforting the small boy by telling him he should soon come back, and holding Dolly's hand for one long minute as he tells her to take care of herself and to go out hunting with Rose. He is gone now, and every day Ferdie laments his absence, and Dolly sits by quite mute, and says nothing; only she feels an utter weariness come over her, a listlessness that she is for ever combating, a constant ceaseless longing for Uncle Tom and Aunt Mary. She has received the kindest and most loving letters from them on Christmas Day, letters which have made the tears rise in her eyes, but which have contained no syllable of Harry, for Mr. Bruce has made up his mind that, as her father disapproves of the engagement, he must not in any way foster it.

But now, at last, she has heard from Harry himself, and has no need to ask news of him from any one else, and on Christmas Day, with the full sanction of Sir Augustus, instructed by his wife, sent him off such a warm, affectionate answer to his letter, with such assurances of her undying faith and her wish to marry him when of age, as have rejoiced the poor boy's heart, and caused him to write a second letter of even more passionate love and devotion than the first.

The present he spoke of, too, has arrived—an old silver chatelaine of exquisite workmanship, massive and costly. Dolly has donned it at once, thereby causing Lady Travers many a pang of envy, but at the same time thinking that if any one asks her who gave it to her, and she responds, "Mr. Leonard," they will be perfectly at liberty to draw what conclusions they please. But Sir Augustus has ordered it to be withdrawn from public notice, and now it rests securely in a chest of drawers, hidden from the curious gaze.

She had many presents on Christmas Day, noticeably a beautiful old-fashioned ring from Ferdie, who slipped it on with his own thin little fingers, and made her promise to wear it all her life.

"I know it is good," he added, "for Geoffrey chose it; and he knows all about those things."

Dolly could hardly keep back her tears as she kissed the small white face, and readily gave the required promise, thinking how her boy must have saved up his money to buy her anything so valuable. And, side by side with the chatelaine, locked up away from her own eyes, lie two volumes of Goethe's Lyrics, given her also on Christmas Day. It was Mr. Ingram who put them into her hands, as "his contribution to her German education," he said laughingly; and, seeing that he was dispensing presents to Rose and Lou, Dolly could say nothing but an inaudible little "Thank you," and fly with them up-stairs, thrusting them, without even looking at them, into the furthest recesses of a drawer. Yet, when once outside her room, on her way down-stairs, she must needs return, and opening the drawer, softly take out the two books, gaze upon them as though they contained some charm or spell, then, roused by the gong, very gently—almost reverently—put them back again, and once more turn the key on them.

And Geoffrey had noted the rising blush, the slight confusion of manner, and had interpreted them to himself in his own fashion, which seemed to make him supremely contented, for throughout the day he was the life and soul of the party. It was years since he had indulged in castles in the air, yet he resumes the old bad habit once more, and fills up many a vacant half-hour when riding to covert or returning home, whilst on his visit to his cousin, Lady Lucy Duncombe, with visions of a charming apartment in Rome, of which the chief ornament is a slim soft-eyed girl; of rambles in the Coliseum—probably by moonlight—and not alone; of wanderings through picture galleries, among statues and bronzes; of spring in the Campagna or the Pamphili Gardens; of teaching and learning; of loving and being loved; of a wife after his own heart.

What a series of pictures the very word "Rome" conjures up, any one who has been there well knows; and to Geoffrey it was one of the most delightful parts of the programme he had mapped out for himself that he should take his wife thither. How, with her refined cultivated nature, she would revel in its treasures, eye and mind luxuriating in its wealth of colour, its depth of associations! What sketches she would make among the Alban Hills! How prettily she would learn the soft melting language of Rome! Assuredly Lady Lucy was justified in teasing him, and accusing him of being in love, for she certainly had grounds for so doing; and considering that nothing would induce him to stay with her after the 11th, for on that day he *must* return to the Travers', it did not require any very great sagacity to fix upon Wrangham as the abode of his magnet.

And yet he did not feel absolutely sure of his prize. Her manner to him had always been so perfectly simple and unaffected; she had at once, and so completely, accepted him as the old friend of the family, and treated him as such. Only lately—just lately—he thought he had noticed a little hesitation, a little shyness in her intercourse with him, which he chose to construe in his own way. Lady Lucy was as a sister to him, but not even to her did he breathe one syllable of his hopes and fears; yet she could hardly help smiling when he asked her, apparently casually, one day, how little she thought two people could live comfortably on. For Geoffrey, accustomed all his life to plenty of money for a bachelor, and looking on a woman as a creature to be surrounded with every care and luxury, had an idea that his own moderate fortune would be almost starvation to a wife, and was much relieved by his cousin's prompt and decided answer, carefully adjusted to what she knew him to possess. He had still six weeks' leave of absence before him, and fully resolved as he was not to take Dolly from Wrangham as long as Ferdie was alive, yet, before he turned his steps towards Italy, she should be, as far as he could arrange matters, his affianced wife. Once or twice there came across him a disturbing recollection of that story of the baron's, told in the smoking-room two years ago. What did it mean? Probably a little feminine jealousy and spite on the part of Anne; surely nothing more. And so the days passed swiftly and happily with him till it drew towards the 11th, when he was to return to Wrangham.

Meanwhile, day by day, Ferdie drooped and dwindled, and Dolly rarely left him. They were all very good to him—his mother, his brothers, and sisters—yet no one was to him like Dolly; and even when the others were with him he loved to have her by his side, to hold her hand, and stroke her face, and look at her with his large wistful eyes. He had many visitors. Joan would come up very often and see him, bringing him books and toys. Good-natured Mrs. Graham, with all her numerous household and parish cares, would pay him a visit three or four times in a week; and when she did not come, Mr. Graham would sit with the child for many a half-hour, unconsciously delighting in the clear speculative little brain that would put him many a question he had to think over before he could answer it. From time to time Sir Augustus would come to see his boy, ask him a few formal questions in stilted language, find fault with any little defect in the room, and retire again, to the great relief of all parties. Yet no one noticed how daily the child failed. They saw him so constantly, were so accustomed to the white thin face, that they could not detect the falling away, only that he was very restless, and that his constant cry was for Geoffrey.

"I cannot die before Geoffrey comes back," he said one day to Dolly. "I have something most important to say to him."

"My darling, he will be here very soon now," she answered. "What makes you talk like that about dying?"

"Because it is true. I cannot live long, and I do not wish to do so. What I care about most is that you should be very happy when I am gone. Not at first, you know—I should like you to be sorry about me—but afterwards. I should so like to be sure that you were going to be married to some one who loved you awfully, and would take you away from home, where, I think, you would always miss me."

Dolly smiled faintly through her tears, longing to tell Ferdie that probably his wishes would be realised.

"My boy, if it makes you happy, try and think it will be so."

"Yes, I do think so, and it does make me very happy. But"—with some anxiety—"you will never forget me, will you?"

"Never, never. How could I forget you, Ferdie, my own loving little darling?"

"No, I do not think you would. Even if you married an awfully nice man, who loved you very, very much, you would always remember, would not you, Dolly, that I loved you?"

"Always, darling. No man in the world could make me forget you."

"That is right. I should not like to be forgotten. Now, do you think that any one cares for you very much, so much that he would ask you to marry him? Because I think, I am sure, I know some one who does, and—and—— Why, Dolly, what is the matter?"

"Don't, don't, Ferdie. You must not talk like that, indeed you must not. You are too young, darling, to understand such things, and I do not like it. I shall try and be happy, whether married or not, but we will not talk about it, Ferdie."

"Not if you do not like it," rather reproachfully; "but I was only thinking of you. Oh, Dolly, don't cry, don't, dear!" for Dolly had leant her head on the table, and the long-kept-back sobs would burst out. Only for a minute, though. They must be reserved, as they often were now, for solitude and darkness; in Ferdie's presence they must be sternly repressed.

"I'm all right now, darling," she said, turning to him a very April face, "only—only silly."

"I like you silly, Dolly," he answered. "I hate wise people. Mother is wise; but if I were a woman I would rather be silly."

"Ferdie, you promised me never to speak like that of mother."

"I forgot. I won't do it again."

This was only one of the many conversations Ferdie held with Dolly, and with no one else, on the subject of his own death. When alone with her, and feeling strong enough to talk, he seldom conversed on any other topic. The old vanity and self-consciousness, so prominent in his character, would crop out in this unexpected form, and he would speculate as to how he would be missed, or the contrary, when he was gone, in a manner painful in the extreme for Dolly to listen to. But he never again alluded to the "some one" who he thought would marry his sister one day, or to what would become of her after he was dead. In his own mind her future life was happily mapped out, and often when he lay quite still, with closed eyes, he was picturing to himself Geoffrey and Dolly sitting together under an olive-tree—his main idea of Italy—and talking of himself.

The days passed away swiftly enough, and on the 11th a large party was to arrive at Wrangham for the gaieties the next day. These gaieties, owing, within this last week, to the disastrous death of the master of the hounds in the hunting field, had suddenly assumed a subdued, not to say mournful, character; indeed, they would have been altogether suppressed had it not been for Lady Pendleton—a woman at all times regardless of the conventionalities—who, throwing herself into the breach, issued cards for a party—the exact nature of which no one knew—for the very same day on which the more public festivities should have taken place. On the cards was inscribed "Small and early," but it was well known that the whole neighbourhood would not only be there, but would stay late; and there was no doubt that Lady Travers, although slightly scandalised, would be no whit behind her neighbours. Dolly was much perplexed as to what she ought to do in the matter. If she alone of all the family kept away from Gorham on the score of Ferdie, was she not thereby setting herself up as a contrast to his own mother and sisters, which might be very annoying to them? And if, on the other hand, she did go, how could she keep the vow she had made to avoid Geoffrey Ingram, without noticeably doing so, until his departure from Wrangham?

But these perplexities were all unknown to the rest of the family. None of them asked her if she were going or not. Rose was, and that was quite sufficient. Her toilette was to be *the* dress of the evening, and was destined to bring Lord Marsland to a sense of his duty. For that interesting young man had been fluttering about Wrangham ever since he had dined there, and Lady Travers' hopes were high, for on the present occasion he was to be one of the guests staying in the house. Sir Augustus seemed to have forgotten all his virtuous precepts, for he smiled complacently on Lord Marsland, who was well known to commit more follies in twenty-four hours than poor Harry in the whole course of his life.

So Dolly prepared her dress, and waited, yet when the 11th came round had hardly finally made up her mind. It was in the afternoon of that day that she was sitting as usual with Ferdie, who lay dozing on his couch, his face deadly in its whiteness, relieved only by the blue veins that stood out so strongly on temple and eyelid, when she heard a knock at the door. It was early yet—not more than three o'clock—and, thinking it might be Joan or Mrs. Graham, she rose to warn them that Ferdie was asleep. But it was neither with Joan or Mrs. Graham that she found herself face to face. Why was it that the hot colour came crimsoning forehead, cheek, and throat, as with a feeling of pained delight she recognised Mr. Ingram?

"I thought I should find you here," he whispered; and whether it was the whisper, or the slight emphasis on the word "you," the colour fled from her face, leaving it as white as it had been red, as she responded in an equally low key—

"I am just going away, as he is sleeping."

"Going out?"

"No; I have some long accounts to do in my own room."

Geoffrey looked at her; he was disappointed. He did not know how inwardly Dolly was reviling herself for the first approach to a falsehood that she could remember.

"We cannot talk here, or we shall wake him," he said. "Come outside."

Dolly obeyed, and as Gretchen arrived, in obedience to a summons, a slight smile broke over her stolid features, as she passed them on the landing to enter the school-room; for though stolid, she was not blind, and some time ago she had arrived at the same conclusion as Ferdie.

"Never mind the accounts," Geoffrey was saying, "you can do those at any time, and you do not get over-much exercise. I heard the hounds close by; let us go out and find them."

"Indeed, indeed, I must do the accounts."

"I dare say we shall fall in with some of the boys," with an amused smile, fancying that perhaps it might be the proprieties, at times so rigidly enforced by Lady Travers, that were troubling her. "Anyhow, I will not take a refusal. So go and put on your hat."

"I ought not to go out"—this with most complete sincerity.

"We will do the accounts together when we come in. I imagine they have some connection with the parish, and Christmas blankets and coals. Ah! I thought so," as Dolly involuntarily smiled, "and for anything so *very* complicated two heads are better than one. Now, will you go and get ready?"

"I suppose I must. But I shall do the accounts by myself, although they are so *very* complicated. Will you—will you find the boys then? they are somewhere about in the stable-yard, I think;" and, afraid of any further *tête-à-tête*, she fled precipitately, fully resolved not to emerge from her room till she had secured a body-guard in the shape of her brothers or Harry Cartwright.

"So, after all, it was the proprieties that were troubling that pretty head," thought Geoffrey, as he departed with a light heart to find Gus and Bob. Instead of which he met Lady Travers, giving orders to the gardener about some plants, and unwarily mentioning that he and Miss Travers and the boys were going to look for the hounds, was detained on one pretext or another by his hostess till he exclaimed that he could not keep Miss Travers waiting any longer.

Was it time now, thought her ladyship, to tell him of Dolly's engagement? No, not yet; she would watch the two this evening, and then perhaps. Meanwhile—

"I will accompany you to find the hounds, Geoffrey," she said sweetly, "and we will both go back and pick up Dolly."

"I am afraid they are gone by this time," he answered, somewhat moodily, "I do not hear them any longer."

"Well, all the better, we will not trouble our heads about them at all, but return to the green-houses. What was it you were saying about that fern of Lady Lucy's?"

"But what will Miss Travers think of me? I must certainly return to the house to tell her the change of plans."

Lady Travers gave Geoffrey a swift searching glance, which served to put him on his guard. He was, he knew, no very desirable *parti*, and not till he had secured his prize must he allow her ladyship to guess his wishes.

"I will send one of the men," she answered; and desiring one of the gardeners to go up to the house and let Miss Travers know that she and Mr. Ingram were in the green-houses, she dismissed the subject of Dolly, and returned once more to orchids and ferns. Geoffrey went pottering round the houses, listening, or rather not listening, to Lady Travers' dissertations on horticulture, looking through the glass panes to see if he could discern a dark green serge dress coming up the path, and feeling as though he would much like to stamp on all these lovely camellias, ferns, and orchids that were unconsciously detaining him a prisoner.

And Lady Travers, on whom nothing was lost, noticed each one of those glances, and was obliged sorrowfully to confess to herself that Rose was right. But as no green dress did appear, she looked at her watch at last.

"Half-past four!" she exclaimed. "I had no idea it was so late. I must go in; those people will be here directly. Come, Geoffrey, I must lock the door behind me."

And Geoffrey, turning over the violet-beds on his homeward way, gathered a large bunch, of which he offered half to Lady Travers.

"And those?" she asked, pointing to the other half.

"For Ferdie," was the prompt response, as they opened the hall-door, and entered the house.

"If Dorothy should happen to be with Ferdie, will you send her to me at once in my room? I have to make some little arrangements about this evening." And, well pleased with her afternoon's work, Lady Travers retired up-stairs to prepare herself for the reception of the guests she expected a little later.

But when Geoffrey entered the school-room, ready to offer the most humble apologies to Dolly for his conduct that afternoon, he found Ferdie alone with the nurse, and with such a solemn little face as made him fear something must have happened.

But the child, after dismissing the servant and greeting him with more than his usual warmth and effusion, assured him that there was nothing the matter, only he had something very important to say to him.

"Wait for one moment, Ferdie. Where is Miss Travers?"

"In her room, I think."

"Do you know I have been very rude to her, and I want to beg her pardon."

"*You* rude to *Dolly!* Oh, Geoffrey! she always says you are so polite."

"That is very good of her, but she will say so no longer;" and Geoffrey related to Ferdie the occurrences of the afternoon. Ferdie looked his wisest.

"I quite understand," he said; "mother did not wish you to walk with Dolly. Don't you see that? And that is just what I want to tell you about. Do you remember what I said to you two years ago? Take me in your arms, I want to whisper it all to you."

Geoffrey took the child in his arms. What a little feather-weight it was! Lady Lucy's fat baby was three times as heavy.

"I remember," he said, as he arranged a pillow for the little fair head, "I remember you said a great many things to me two years ago, Ferdie."

"Ah! but don't you recollect my saying how nice it would be if you married Dolly?"

"My memory is very bad for nonsense."

"It is not nonsense," vehemently; "it is perfect sense. Don't you think," coaxingly, and directing a searching look on Geoffrey's countenance, "that it would be very nice?"

"Don't you think that little boys had better not meddle with those things?"

"But, Geoffrey, dear Geoffrey, I am not a little boy. I am nine years old, and I am soon going to die; and when I am dead, who will take care of Dolly?"

"My boy, do not talk like that. Your sister is in her own home."

"Yes, and a great deal her own home cares for her. It is always Rose and Lou, but no one thinks of Dolly. No, I will not get excited, I will be quite calm; but you know, Geoffrey, as well as I do, that all mother and father care about is to make use of Dolly. Has she not saved us a governess ever since she came home? And when I am dead, no one will love her."

"Your brothers and sisters are all exceedingly fond of her."

"Because she is so sweet and good-natured; but there will be no one to take care of her. I should like to know, before I die, that she was likely to be married to some one who would love her dearly, and make her happy, and," with a little sob, "I always thought you would, Geoffrey."

"What made you think that?"

"Because you are so fond of her. I can see as well as other people, and I know you have always liked her; but now you more than like her, and it made me so, so happy."

"Poor little Ferdie, did it?"

"Yes; I thought that, although you are not rich, yet you would make Dolly very happy, and be a good husband to her; better than Harry Cartwright."

Geoffrey gave an almost imperceptible start, yet could not help smiling at the quaint outspokenness of the child.



"WHAT DOG DO YOU MEAN?" (*p.* 395)

"And Geoffrey," continued Ferdie, "if you do love Dolly, why are you not kind to me, and why will you not tell me you will ask her to marry you? I will tell you a secret: I think Dolly——"

"No more, Ferdie. That is enough; but I think you may make your mind easy about your sister's future."

"Then it is all right. Oh! Geoffrey, dear, dear, dear Geoffrey, how I love you!"

Geoffrey could only smile. He had not the heart to rob the boy of this comfort in his last hours, knowing as he did that he had every intention of carrying out his wishes. That, combined with the child's eagerness, with the change that even the fortnight's interval had wrought in him, which told him that death could not be far distant, had led him to the tacit confession that he could not but feel it was foolish to entrust to a child; but when he saw the lighting up of the little face, felt his hands seized and kissed, and heard the warm loving words, he did not regret it. He understood that in that fragile body beat a warmer heart, and under that fair hair lay a clearer brain, than was to be found in most of the members of the family.

"You must promise me, Ferdie," he said gravely, "that you will not say another syllable on this subject to me or to any one else. It is one on which children of your age should have no ideas at all; and therefore, as I have listened patiently to all your nonsense," with a smile, "you on your part must give me your word as to your future silence."

"I promise, on my honour, as a gentleman, never to mention the subject again. But it is not nonsense, Geoffrey, is it?"

"Not another word, Ferdie. You are quite exhausted, my boy. Lie quite still, and I will tell you a story before your tea comes in."

And when Gretchen and the nurse came in, they found Ferdie lying in Geoffrey's arms, with a look of exquisite contentment on his colourless face, and a soft child-like smile playing round his lips. But to-night Dolly, for the first time for many weeks, did not give him his tea.

CHAPTER THE TWENTY-SECOND.

THE END.

FERDIE had been unusually brisk all day, and Dolly, quite in spirits about him, had decided finally to go to Gorham. Lady Travers had said to her, "Do as you like, dear child," and after many internal pros and cons, she had arrived at the conclusion that her wisest and most unobtrusive course of action was to make one of the party.

Since last night Geoffrey had had no opportunity of speaking to her, beyond the ordinary salutations in the morning, and now, when he was hoping to have a few words with her after dinner, he found she had disappeared to dress. But this little disappointment he bore with equanimity. At the Pendletons' this evening he should have her all to himself. No Lady Travers, no Harry Cartwright, should prevent his devoting himself to her, and what might not be done in the course of so many hours? Meanwhile he was sure of her going, for was she not gone up-stairs to dress? That was quite true, but had he forgotten that old proverb about the cup and the lip? Apparently he had.

Before repairing to her room, Dolly went in, as was her wont, to see Ferdie, and to sing him to sleep. The child was lying wide awake, waiting for her; the room quite dark, but for the light from the fire and the clear, cold rays of the moon, that shone through the window-pane unshaded by a blind. Ferdie had a strange love of the moon, and now it was shedding its dim, ghostly light on his face, rendering it if possible more pallid than it usually was, as he turned his head on Dolly's entrance.

"Dolly, don't go to-night."

"What is it, darling? Do you want me?"

"I do not wish you to go. I know I shall have a bad night, and I would so much rather have you with me than nurse, unless—do you want to talk to Geoffrey?"

"No, dear, not in the least"—the one thing she wished to avoid—"but what makes you feel you are to have a bad night?"

"I am so restless and wakeful, and oh! Dolly, I feel so frightened. I keep on seeing that dreadful picture in the scrap-book down-stairs, of the skeleton on the white horse, and," in a whisper, "I think he is coming for me."

"I won't go, Ferdie. I will stay with you;" taking the little clammy hand, and kissing his forehead, "and we will ask nurse to let mother know my decision; and I will tell you such a funny story Mr. Trevor told me at dinner. But first of all, as I am not fond of sitting in the dark, I shall draw down the blind and light the candles. There," suiting the action to the word, "that looks a little more cheerful, does it not?"

So that knotty point was decided, and Dolly sat down, not to reason away Ferdie's fears, but simply to divert his mind. The child was in such a state of nervous terror that she would not have left him for the world, and it required all her tenderness and tact to soothe him back to calmness.

On receipt of the message, Lady Travers arrived to see what ailed Ferdie, and feebly to try and persuade Dolly to alter her mind. In her heart she was rejoiced at her decision; for Dolly was so pretty that some people might prefer her to Rose, therefore it was just as well that the latter should gather all the laurels, and her sister be left to bloom unseen. Easily framing in her own mind an excuse for her step-daughter's absence that should not give the neighbourhood an idea of neglect on her part, she kissed Ferdie with unusual warmth, told Dolly what she sincerely thought, that "she was a good girl," and repaired to tell Rose that she and Joan were to be the only Misses Travers at Gorham.

It was not till the party were all assembled to depart, and a fly full of young men already sent on, that Geoffrey became aware that Dolly was missing.

"Why," he said to Rose, "we are going without your sister; she is not come down yet."

"She is not going at all," responded Rose; "Ferdie wants her to stay with him."

"Not going! She told me herself before dinner that she was most certainly to be of the party."

"It is permitted to a lady to change her mind three times, and Dolly has changed hers. Don't be quite inconsolable, please."

"I will try and get over it, but seriously I am very sorry for your sister. She would have enjoyed this evening."

"Come, Mr. Ingram, you are to squeeze in here," cried a voice from outside; and Geoffrey found himself relegated to a very small corner of an omnibus, for a five-mile drive, which fact, combined with Dolly's non-appearance, caused him and Joan, his next-door neighbour, to put their heads together to moralise on the vanity of all things, as they had so often done in the Berlin days.

Since her curious behaviour to Dolly on the night of her return home to England, Joan had striven to make amends for her brusqueness of speech, and had been all that was nice and kind, and Dolly had at once accepted these overtures, trying to think that her cousin had on that occasion been both tired and cross.

To-night, however, there was no Dolly to act as her rival, to come, as she fondly and vainly thought, between her and her happiness; to-night the opportunities were all hers. As she entered the drawing-room at Gorham, on Geoffrey's arm, she was greeted with enthusiasm on all sides by her old friends, delighted to see her once more amongst them, and she found that she had done wisely in yielding to solicitation, and coming, so warm was her welcome, so cordial the pleasure at her re-appearance; and her enjoyment was not to diminish as the evening advanced. The entertainment, which had given rise to so much discussion and speculation, commenced with amateur theatricals, throughout which Joan and Mr. Ingram sat in close proximity to one another, sufficiently intimate to talk or not as they chose, one of them at least happy with a contentment of which she herself was hardly conscious.

Truth to tell, her companion was not in an equally genial frame of mind; he was, as he himself expressed it, out of sorts, inclined to look with a critical eye on all that was going on, and astonishing Joan by the unusual sarcasm and severity of his remarks. He was not certainly in a merciful humour, and the sight of Rose, with Lord Marsland lolling at her side persistently throughout the evening, raised all his ire against Sir Augustus, who could thus allow his daughter to be made conspicuous in the eyes of the whole neighbourhood. Could he, or rather, could Lady Travers have any idea of the character of this boy she was encouraging? Her ladyship was evidently in her most serene and gracious mood, dispensing on all sides pretty speeches and soft words, so there was no doubt that she, at any rate, was by no means displeased with what was going on by her side; and Geoffrey, thinking that after all it was no business of his, gave himself up to extracting as much enjoyment as he could from his surroundings. There were plenty of pretty girls there, plenty of charming women whom he knew, but why was not Dolly present, to eclipse them all? Whether standing or sitting, talking or looking on, his thoughts were all with her. Why was she not there?

To him the hours were decidedly not winged, and it was a relief when two men of the Wrangham party came up and proposed to him to make the third in a return fly dedicated to gentlemen. After various delays, consequent on one after another of the three disappearing unexpectedly, the party, having cleverly eluded Lady Travers' Argus-eye, got under way, and in due course of time reached Wrangham. The door was very quickly opened, almost as though they had been expected, and the butler's grave face immediately caused Geoffrey to suspect that there was something wrong. It was evidently a relief to the man to see him, although, no doubt, Sir Augustus would have been more welcome; and when he was told that Ferdie was alarmingly ill, it somehow did not astonish Mr. Ingram in the least. It seemed to him that he had known that it would be so, and that he had come home for the purpose of seeing the boy alive once more.

"How long has he been so much worse?" and, when told only the last three-quarters of an hour, he asked if Lady Travers and the doctor had been sent for. Yes, they had. Miss Travers had taken the liberty, she begged him to tell Mr. Ingram, of sending the groom on one of his horses, as all the others were out that night. There was nothing to be done but to wait, meanwhile he would go to Ferdie. The hall clock struck three as, hastily explaining the circumstances to the two other men, he mounted the staircase. What if the boy were to die, and only Dolly and the nurse with him? He knocked gently at the anteroom door, and Gretchen, on the alert, opened it immediately, only to look disappointed when she saw who it was.

"No one must come in," she said shortly, "he is dying."

"Who is with him?"

"Fräulein Dorothy and the nurse."

But he was not to be shut out. Ferdie, all his senses unnaturally sharpened, had heard his step, the step he loved so well, and whispered, "Geoffrey." Dolly, too, had heard it, and wondered how it was he had come, and at Ferdie's request he was admitted.

Even as he entered the room, it struck him as strange that he should be there—he and Dolly together, to watch the passing away of this child's soul, whilst his own father and mother and sister had perhaps only just been made aware that they might possibly not see him alive again.

He was lying in Dolly's arms, wrapped up in blankets, so still, so white, that he might already have been dead. He noticed, too, that Dolly had on the same dress she had worn at dinner, and that her face was nearly as white as Ferdie's. She looked up as he came in, and her lips moved, but he could hardly hear what she said, only he understood it to be—

"Will they soon be here?"

"Very soon now," he answered, gently responding to Ferdie's little smile of welcome, and sitting down close by him. A stillness almost insupportable reigned over the room, broken only by the ticking of a clock, and by the nurse approaching from time to time, he had better make room for the mother and father, so soon now to arrive; but Ferdie's piteous look detained him, and once more he seated himself, only to witness a terrible spasm of pain that racked and shook the frail little body, and threatened to extinguish



"'OH! POOR BRUIN! POOR, POOR BRUIN!' SHE SAID" (*p.* 396).

trying to make Ferdie take nourishment. Geoffrey did not like to look at Dolly, could not bear to witness the struggle evidently going on to force back all emotion, and keep herself calm, to whisper words of love and of comfort to her boy.

So they sat on, the old trio—Geoffrey, Ferdie, and Dolly; and it seemed to the latter, in her forced and unnatural calmness, as though the doctor and Lady Travers never would come.

At last Geoffrey made a movement to go, thinking the tiny flame of life still left. He could be no help to Dolly in it; he could only stand by and admire her courage and quietness as, in conjunction with the nurse, she strove with all the remedies in her power to alleviate his sufferings; and when it was over, and Ferdie lay almost lifeless in her arms, he was thankful to be able to tell her that he heard the sound of wheels.

There was a hushed buzz of voices, a subdued noise of footsteps, and then Lady Travers and the doctor

entered the room together. Geoffrey was pleased to see the real distress depicted on Lady Travers' countenance as she knelt by the side of her child, with the diamonds gleaming in her hair, and her long satin train rustling on the carpet. In these last moments, jealous of Dolly, she would have taken him into her arms, have nestled his head on her shoulder, but that Dr. Hicks sternly forbade it, and so she was obliged to content herself with kissing the little white face, and whispering words of love such as the child had seldom heard from her lips when in comparative health.

They were all there now—Sir Augustus, and Rose, and Lou, and Jack; and Geoffrey, gently kissing his godson for the last time, was about to retire, when Ferdie opened his eyes.

"You remember, Geoffrey," he said feebly.

"Yes, Ferdie, I perfectly remember."

Every one in the room heard Geoffrey's words, and some dully speculated on what they meant; but the child was dying, and there was little time left for wonder. Another spasm, the doctor said, would be fatal. It came with the dawn of day, and with the first pale gleam of the wintry sun Ferdie passed away, his little suffering life ended. His last words, his last look, his last kiss were for Dolly; his last thought, too, for her.

"Be good to Dolly, mother," he had said; and when the girl laid the little lifeless form on the bed, it seemed to her as though the love and the light of her life were gone from her. Even Sir Augustus felt sorry for her, as he noted the white, strained face, the sad, tearless eyes, and heard the doctor whisper that she must be taken away, or she would be ill next. But no one attempted the task; and when the sun was getting high in the heavens, Dolly was still kneeling by the side of the bed where lay her boy. Lady Travers and Rose were sleeping from sheer fatigue, when the nurse at last peremptorily insisted on Dolly's seeking her room. No tears had come to her relief, and with still the same unnaturally calm look on her face, with the rigidly-set mouth, and the wide-open, sad eyes, she stumbled to her feet and obediently opened the door that led into the passage. Like one walking in her sleep, she passed through the corridor, and started, as she turned a sharp angle, to come face to face with Geoffrey Ingram. She would have passed on, but Geoffrey could not see that sad face he loved so well, and go on his way like a mere stranger.

"Dolly!" he said; and at the sound of his voice, so low, and so tender, the girl shivered all over, as with the ague. He would have liked to have taken her then and there in his arms, and let her weep out her sorrow and her grief with him, soothed and comforted by his love; but it was neither the time nor the place for such a proceeding, so he contented himself with that one word "Dolly."

She looked up into his face with wide-distended eyes, but she did not speak, only made a movement to pass on. He stopped her, however, taking her listless, stone-cold hand, as though he had been a doctor, in his. He was frightened at the expression of her countenance, at the dull, stony misery that spoke out of her eyes. She had evidently shed no tears, and instinctively he felt that she must be made to cry. Would any one take that trouble for her?

"My child," he said; and again she shivered like an aspen-leaf, and, withdrawing her hand, made another attempt to pass on, but still he detained her. "Won't you go and lie down? You will be ill if you do not take care of yourself."

"I am going," she answered, in a hollow voice.

"That is right," he said, thankful to have won speech from her, "and when you are in your room, I think," with a sudden inspiration, "you would like to read this;" and he drew from his pocket an envelope, on which was inscribed in Ferdie's childish handwriting, "For Dolly," and gave it to her. For one moment she looked at the large round letters, and then burst into a passion of tears, whilst Geoffrey, manlike, stood by, quite staggered by the success of his own stratagem.

"I beg your pardon," she said at last, amid her sobs.

"No need for that," he replied, bending his earnest gaze upon her face. For one moment their eyes met, and again Dolly shivered, the next she had gained her room, and, locking her door, was alone with Ferdie's last missive.

CHAPTER THE TWENTY-THIRD.

HIDE AND SEEK.

A FORTNIGHT had passed away since Ferdie's death, and Wrangham had recovered externally, at any rate, its normal aspect. There was one more little grave in the churchyard, another empty room in the house, otherwise but little change. After the first burst of grief, Lady Travers had resigned herself to the loss of the child, who had never been a favourite, with that adaptability of disposition which was one of her most prominent characteristics. Sir Augustus did not pretend to grieve. The boy had been an invalid almost from his birth, and, although he did not say so in words, he considered his death a "happy release." And so it undoubtedly was. No one could grieve for the child, whose whole life had been one of suffering, and Dolly, in the intolerable void that had come to her, felt that she was selfish in longing every hour and every day to see his dear little face once more, to feel his little arms around her neck. She went about the house like a ghost, for ever fighting and struggling against her grief, and getting visibly whiter and thinner. As much as she could, she threw herself into active duties; but, turn her thoughts where she would, she could find little peace. She was to go to the Bruces' for change of air, as soon as they could receive her; but just now there were repairs going on at the Rectory, and they could not possibly take her in. So she stayed on at home, going about as usual after the first two or three days, and making herself useful to her step-mother, whilst secretly sleeping but little and eating still less.

Geoffrey, at a broad hint from his hostess, had re-

moved himself and his horses to Wreford, as soon as Ferdie was dead; and, although he managed to be over at Wrangham most days of the week, yet he had not once seen Dolly since their interview in the corridor. In answer to his inquiries after her health, he was told that she was well; and, try as he would, he could not catch a glimpse of her. If he stayed to lunch, she was sure to be at the Lodge; if he dined, even, she was spending the evening with the Grahams. Yet his time was growing short, and he fully intended to repair to Rome, having asked her to become his wife.

Lady Travers did not fail to notice his wandering eye each time the door opened, his absent manner, his long silent pauses, and every day she resolved to tell him of Dolly's engagement, and was prevented by some trivial circumstance from so doing. Meanwhile, she encouraged Dolly to spend a good deal of her time at the Lodge, where Joan was ill with a bad feverish attack of influenza, and was consequently sadly out of spirits. The freshness of coming home had worn off, and every day made her feel yet more keenly her loneliness. The Rushbury influence, too, refining and elevating to a certain degree, as it had been at the time, was rapidly evaporating, and her friends noticed with regret that she gave signs of becoming in course of time, if left to live alone, almost as eccentric as her mother, unless curbed and restrained by a man's guiding wisdom. Her house was a kind of menagerie, her drawing-room a kennel, where old Bruin reigned supreme. Many a timid friend, many a fastidious acquaintance, was deterred from visiting her through fear or horror of the barks and yelps, sometimes growls, with which they were likely to be greeted, and the more so that just then a hydrophobia mania was beginning to rage in the county, such as periodically breaks out in England when times are dull and the newspapers at a loss for news.

Joan, kept a prisoner to the house, read every letter on the subject, and railed against those cautious folk who allowed no quarter to their animals, but ordered them mercilessly to be shot, almost if they came within sight of a mad dog. Dolly, sympathising fully with her cousin in her love of dumb creatures, would listen patiently to her tirades on the folly and iniquity of such people, yet wishing the while that with her warm heart she had a larger scope than the woes of the canine species, which just now seemed to fill it so completely.

And Geoffrey Ingram would trot past the Lodge gates on his way to Wrangham in search of Dolly, and then back to the Lodge, to hear that Miss Travers was in her room and Miss Dorothy gone to the village. He visited Ferdie's new-made grave in hopes of finding her, and although everything spoke of her tender, loving care, yet she herself was not there. Lady Travers did not ask him to resume his residence at Wrangham, and, intimate as he was, he could not invite himself; so he dallied on at Wreford, and the days grew longer, and there was a spell of soft, muggy, spring-like weather, when the violets showed their little purple heads, and the birds held wedding feast, and he was reminded that he would soon be treading the cyclamen under foot in the Campagna, or drinking in the scent of the violets in the Pamphili Gardens.

One afternoon, on his return from hunting to his hotel, he found a small packet in his room, directed to him, in Dolly's handwriting. With it lay a note from Lady Travers, saying that her dear dead child had had a whimsical fancy to make his will, and in it he left Mr. Ingram the silver watch and chain he had given him two years ago. In accordance with his wishes she had sealed them up, and left them now at his hotel for Geoffrey. Next week, she added, they were all going away, and Wrangham would be given over to the housemaids. This was a very decided hint to him that he need not expect to be asked there again, and, dismayed to think that Dolly was slipping from his grasp, he tore open the parcel, to find only the watch and chain reposing on cotton-wool; not a word or a line in her handwriting, beyond the "Geoffrey Ingram, Esq." What had come to her? he asked himself. Why did she avoid him? for it was clear to him now that there was considerable method in the manner in which she contrived never to meet him. Was she offended that on that morning in the corridor, when her thoughts had been all with the dead, he had dared, though covertly, to show his love? or was it that he and Ferdie were so connected in her mind that she could not trust herself to meet him? Something of the kind it must be; the sooner, therefore, he saw her the better, and to-morrow it should be done.

But he had not much time for these reflections. He was dining out that night, and had to hurry himself previous to starting on his four-mile drive. Arrived at his destination, not a minute too soon, he found all the talk at dinner turned on a most engrossing subject—a case of hydrophobia in the neighbourhood. The worst part of the story was that the mad dog was abroad, and doing incalculable mischief by biting other animals. It therefore behoved all gentlemen to go about with their guns, and, if possible, to put an end to the beast.

Geoffrey did not pay much attention to all this, knowing the panic that the very word hydrophobia produces; but when his ear caught something about Wrangham and Miss Travers, he began to think he had better be more attentive. He turned, therefore, to his next-door neighbour, and asked for an explanation, and was told that about a week ago this same dog, since gone mad, had had a desperate fight with Joan Travers' old pet, Bruin, and bitten him severely. Geoffrey remembered the fact well, recollected how Lady Travers, in recounting it, had laughed at Joan, who sat up all night with her dog, bathing his wounds, and by her skill had quickly brought him round again. Since, however, the aggressor had gone mad—so the story ran—a formal deputation, headed by Sir Augustus in person, had been sent to Joan, requesting that Bruin should immediately be shot, or put out of the way in the mode most pleasing to his mistress.

To this request, though tendered by her uncle, Joan had given a very decided negative. No dog of hers, and most certainly not Bruin, should be shot, or in any way put to death, to satisfy the cowardly fears—"rather strong language," as the narrator remarked—of people who knew nothing at all on the subject. In vain Sir Augustus protested, in words of awful warning; Joan only laughed at him, and told him to go home and administer poison to Lady Travers' two fat pugs. The utmost she would concede was that Bruin should be at once shut up, and the hundred and one remedies that she had culled from the papers tried upon him.

"I know this is true," added the lady, having so far finished her narrative, "for Rose Travers told me the whole story herself to-day. Since then," she continued, "Lady Travers, who prides herself on always getting her own way, has been to see Joan, to try and persuade her to have her dog despatched, but she also has failed; so there's nothing left for them to do. Sir Augustus never goes out without a gun, and his one wish is that he may meet his enemy and shoot him through the head."

"There was a little man, and he had a little gun," laughed Geoffrey, irresistibly struck by the comic side of the story, picturing to himself Sir Augustus's face and attitude when he did come face to face with Bruin; but he quickly perceived that his neighbour took it all, as it probably was, as a very serious matter, so composed his countenance, and looked as grave as the occasion required.

"Do you know," he said, "I think Miss Travers has reason on her side, as long as Bruin is properly secured."

"But if he goes mad?"

"Then shoot him; but why do so whilst he is sane?"

The lady looked at him as though he had been some dangerous animal himself, and ceased the subject. How could she discuss mad dogs with a man who held that a bitten animal might be suffered to live?

Through the evening, however, the controversy raged, with that heat and freshness so noticeable in the country, where the same topic is served up again and again for many months, and where a new one is hailed with a delight and fervour out of all proportion to its merits. The mad dog was the hero of the evening, and Bruin only second to him in interest. Geoffrey went home, resolved to walk over to Wrangham the next day, armed with his gun. Perhaps, in the excitement of a discussion of Joan's misdemeanour, Dolly might make herself visible.

CHAPTER THE TWENTY-FOURTH.

BRUIN.

IT was yet quite early when, on the following morning, Geoffrey set out for Wrangham. He was on foot, for his horses needed rest, and he had his gun with him. In spite of his momentary laughter, the mad dog had assumed to him a really serious aspect, when it had come to the names of Wrangham and Travers. He walked along between the hedge-rows, where the violets were just beginning to lift up their heads; he listened to the carolling of the birds, revelling in the sweet spring-like sunshine, and he thought of Dolly. Should he see her to-day? Would to-day bring him the happiness he had now thought of for so many weeks that it seemed to him that he had always loved her, since first he caught sight of her sweet, fair face, her lissom, dainty figure in the drawing-room at Wrangham, standing by Ferdie's sofa?

The road did not seem to him long, nor did he heed the thick mud, only he was impatient to see her—his Dorothy—once more. Arrived at the village of Wrangham, he found that something unusual must be going on. Every cottage door was open, and in each one stood a woman or a child, armed with some instrument of destruction, in many cases of a domestic nature. One was brandishing a saucepan, another a chair, a third a knife; but they were all warlike of aspect, for at present the enemy, as far as one could tell, was not visible.

He stepped up to a small urchin standing in the road and flourishing a stick of formidable dimensions, and inquired for whom he intended it.

"For the dog, sir," he answered; "he has got loose, and if he comes this way we shall all be bit."

"That you most certainly will be if you touch him with this stick," Geoffrey replied, quietly appropriating the weapon. "What dog do you mean?"

"Bruin, sir; Miss Joan's dog. Her as lives at the Lodge. He be gone mad, and broken loose, and they are hunting for him everywhere. Miss Joan, she be out too, a-looking for him."

"Do they know at the Manor?" asked Geoffrey, a sudden terror seizing him. What if Dolly should be out?

"I don't know, sir; we've only just heard it ourselves."

Taking the boy by the arm, he asked him where he lived, and as it was close by, he drew him into the cottage, at the same time delivering a lecture to his mother on the absurdity of provoking a mad dog by useless aggression. The best thing they could do would be to keep themselves and their children within doors, and allow the animal to come quietly within hail of some man with a gun. The woman promised obedience, and, as a first step, placed her knife on the table and shut the door, whilst Geoffrey proceeded to give the same advice all the way round, feeling pretty sure that this valiant front would speedily melt away should Bruin really show himself among them. In his own mind he very much doubted if the dog were mad at all, thinking the fact might be that he had simply broken loose from his confinement; but shortly afterwards, meeting the gardener from the Lodge, he was informed that the villagers were right. Bruin was undoubtedly mad. He had shown slight symptoms of it last night, but Miss Travers would not allow him to be destroyed, and whilst she was at breakfast this morning he had escaped from his kennel, and was now roaming about the country.

"Miss Joan is pretty nearly distracted," said the

man, compassionately, for her servants were one and all fond of her; "she rushed out of the house with a pistol, declaring she would shoot the dog herself. And she will too, sir, if she meets him."

"And the Manor? Has Sir Augustus been told?"

"I believe so, sir; but I really do not know."

Geoffrey proceeded on his way, full of pity for poor Joan. Well he knew her hot, impetuous nature, and could imagine with what agonies of remorse she was now expiating her wilfulness. Much he wished that he might meet her, and ardently as he longed to see Dolly, yet she, he hoped, was safely at home. Engrossed in his thoughts, he came to a footpath which eventually led by rather a short cut to the Manor, but continued by the side of the road for more than half a mile before diverging thitherwards. This path was raised considerably above the road, being separated from it by a very low, slight hedge, which on the other side was banked up by a steep grassy slope from the lane beneath. Geoffrey therefore commanded a good view of the road, and of the two or three other lanes that led into it—one from the Lodge, the other from the churchyard. If Bruin were to approach from any of these avenues, he should be able to get at him; or if Dolly happened to be about, he should see her.

With this idea he crossed the stile and took the footpath, a vague fear, of which he could not rid himself, causing him to feel that Dolly was somewhere in the neighbourhood. And he was right. He had not gone more than a hundred yards when, with a thrill of delight, he saw her about a quarter of a mile in front of him, emerging from the lane leading from the churchyard.

But how slowly she walked! Her black dress seemed to cling about her feet, the spring and elasticity to have disappeared from her gait. In her hand she held a basket with a few flowers in it, but it hung wearily by her side. Her whole appearance, her whole attitude, denoted a painful listlessness, which struck Geoffrey all the more that he had not seen her for three weeks. That she felt Ferdie's death keenly he could not doubt; that she was ill, of that he was certain. That Lady Travers or Sir Augustus should trouble themselves about this, the eldest daughter, could not be expected; henceforth, she should be his care—no scheming step-mother, no indifferent father in future, but a husband's love and devotion.

The thought caused him to quicken his steps, and, as he did so, a sight met his eyes which made the blood curdle in his veins; for, with lolling tongue, foaming mouth, and blood-shot eyes, Bruin, starting from he knew not where, came trotting down the road into which Dolly had that moment turned. He saw her stop, then run back into the lane she had left. Another minute or two, and the dog would be within gunshot. His heart stood still, though his feet were hastening to the scene of action, when, to his horror, crashing through the hedge within two yards of Dolly, came tearing the "imp" *par excellence* of the village, uttering a fierce war-cry, and brandishing a stick, with which he flew at Bruin. In a moment, without waiting to think, Dolly had rushed after him back into the road, and seizing the child, who could not have been more than six years old, from Bruin's very jaws, ran up the bank on Geoffrey's side, striving to break through the hedge before the dog had recovered his astonishment.

Bruin, roused to fierce anger by the unexpected attack made on him, and uttering a low wrathful growl, which struck a sickening terror to the girl's heart, bounded after her, following her closely. Already she saw his gleaming teeth, and fancied she felt his hot breath, whilst all the ghastly stories she had heard of deaths by hydrophobia passed like lightning through her brain. She tried to speak to him, as she would at any ordinary time, but no sound issued from her lips. Holding the child well above her head, afraid to turn her back on the enemy and get over the hedge, she stood and gazed at the dog advancing on her, with eyes distended with horror and fear. She could not have remained thus above a second, if so much, though to her it seemed hours, when, just as Bruin was about to spring on her, some one leant over the hedge by her side. A loud report, a puff of smoke, a smell of gunpowder, and the dog had rolled down the slope into the mud below, and she was saved. It was all so quick and sudden, the revulsion was so intense, that she could only look, she could not speak. Even yet she was afraid to put the child, the cause of all her terrible fright, down, but, holding him still in her arms, waited there whilst Mr. Ingram climbed over the hedge. Another minute and he was by her side.

"Thank God, my darling, you are safe."

For three whole weeks she had not heard his voice, had not seen his face, and now he had come to save her from a hideous death; and that voice trembled, that face was working with a suppressed emotion hardly second to her own.

And he had called her "my darling," and she belonged to some one else; he looked at her with eyes which told her all his love, and she must give no answering gaze, but turn away. For three weeks she had flown from the danger, and yet her courage was as weak as when she first awoke to the fact that the sound of Geoffrey's footstep, the sight of his eyes, was perfect happiness to her. He was by her side now, and he had spoken to her, and she could find no words to thank him, her preserver, for her life. But he did not seem to mind. He could see the strong agitation that made her breath come and go in fitful, gusty gasps, and turned her face a deadly chalky white. He was about to pass his arm round her to steady her, when little Joe, seeing the dog lying dead in the mud at his feet, began to howl. Geoffrey took him from Dolly's arms, and set him on his feet, and then at last she found her voice.

"Oh! poor Bruin! poor, poor Bruin!" she said, and ran down the slope; and in another moment was by the side of the dead animal, stroking his shaggy head, whilst the hot, involuntary tears fell on his massive paws.

"Poor old beast!" said Geoffrey, "it is a sad death for him, after his long, faithful service."

"I am so glad you killed him," said Dolly, looking up at last; "he might have been mauled by some of the village people, whilst you shot him quite dead. Dear old Bru! Mr. Ingram," with a desperate effort, "I can never, never thank you enough, but you know—you know——"

"But you can thank me quite enough," he interrupted, suddenly taking one of her hands tightly in his, "and shall I tell you how, Dolly?" He felt the hand he held imprisoned trembling in his grasp, her whole frame quivered and shivered as her eyes met his with a world of—surely it was love—and yet sorrow in their liquid depths; but suddenly the two hands fell apart, the two stood upright, for, breathless and panting with swift running, Joan, emerging from the church lane, appeared before them.

Taking no more notice of them than had they been stocks or stones, heedless of the mud and damp, she dropped on her knees by the side of her dead favourite, kissing his shaggy head, stroking his soft paws. Involuntarily, Mr. Ingram and Dolly drew on one side for a few minutes; for the tears were running down Joan's face, as she circled her arms round the old dog's neck, and she was not a woman who would like witnesses to her emotion.

"Who killed him?" she asked at length, in a harsh, imperious voice. Then Geoffrey stepped forward.

"I did, Miss Travers. He was killed on the spot."

Dolly came forward too, walking silently round to Joan's side, and putting her hand caressingly on her shoulder.

But Joan shook it off, as she rose from her knees, and with a new-born dignity put out her hand to Geoffrey.

"I thank you, Mr. Ingram, with all my heart," she said, "for having, perhaps, saved me from life-long remorse. I never thought," she added piteously, "that I should ever thank any one for killing Bruin. Now tell me all that happened."

The story, as told by Geoffrey, was a very short one, his own share in it being reduced to infinitesimal proportions; but it was enough to make Joan turn to Dolly, who, still unnerved and trembling, had retired to sit under the hedge.

"Dolly," she cried, "will you ever forgive me?"

"Of course, dear Joan; it was not your fault."

"Oh, yes, it was; but you had no business to be out when you knew my poor Bru had gone mad, and got loose."

"I did not know it when I went out. It was only as I was coming away from—from the churchyard, that Triggs told me what had happened, and then I hardly believed him."

"Ah! where is that child?" and Joan looked wrathfully around her for a scapegoat; but Joe, conscious somehow of extreme culpability, had levanted at the first sight of her hat, and was by this time safe in the shelter of his mother's arms, where he was relating very volubly, very valiantly, and wholly unintelligibly the events of the last quarter of an hour; the gist of the matter being that, in some way or another, he had distinguished himself exceedingly. So there was not even Joe to blame.

But it was time to be moving. The death of Bruin, with its tragic circumstances, the imminent danger of one of the young ladies from the Manor, had spread by Joe's agency to the village, and already a small crowd was beginning to collect, among them, to every one's amazement, and secretly to Geoffrey's annoyance, Sir Augustus, about openly to rejoice over his fallen enemy. But Mr. Ingram stopped him; for Dolly, instinctively guessing that Joan just now would receive no comfort at her hands, had risen from her seat, and, fancying herself unnoticed, was walking as fast as her trembling legs would carry her towards home. But not one of her movements escaped Geoffrey.

"Sir Augustus," he said hurriedly, "will you stay here with Miss Joan? She is terribly upset over this business, and will want some one with her. I will see Miss Dolly home. I do not think she is very well, she has had such a fright;" and, without waiting for his answer, Geoffrey set off in pursuit of Dolly.

But Sir Augustus had no mind to assist at the last ceremonies for poor Bruin; that was much more in Ingram's line, he thought. Accordingly, he in his turn detained Geoffrey.

"I will see my daughter home," he said, with his usual cold pomposity, "and perhaps she will favour me with the whole history of this—this," he hesitated for a word, "this scandalous business."

Geoffrey saw plainly that Sir Augustus had no intention of staying, and he could not leave Joan alone in her distress.

"Very well," he answered curtly. "I shall turn up about luncheon-time."

Joan, meanwhile, had been giving her orders, and she now turned to Mr. Ingram, with the same dignified manner she had assumed towards him before.

"Pray do not let me detain you, Mr. Ingram," she said, "I am sure your business at the Manor is pressing. Dorothy has gone on; will you not join her?" There was no doubt what she meant, conveyed more by the expression of her face than by her actual words. She had seen them together, and drawn her inferences. Well, if it were so, he could not help it. Soon, very soon, he hoped that the whole world would know that Dorothy had promised to become his wife.

Meanwhile, "I am in no hurry," he answered, thinking of Sir Augustus walking beside his daughter, "and I may be of some little use to you. Miss Travers is being taken care of by her father."

And Joan allowed him to stay, allowed him to walk with her to her own hall-door, and there bade him good-bye.

"Good-bye, Mr. Ingram. I dare say I shall not see you again before you go—if you are going. I hope you will be very happy, very successful in your new home, and with all your new surroundings, where I have no doubt you will quite forget Berlin. I cannot tell you how I thank you for your work to-day, and for bearing with—my silliness, I suppose most people would call it. You know he was my mother's favourite." She gave him no time to answer; for, before he could speak,

she had turned into the house and shut the door, almost in his face. Up-stairs, in her bed-room, she threw herself on the bed, and the great sobs came thick and fast.

"Everything I love, every one I love, all gone from me; all, all gone." That was the burden of her cry. But by degrees she grew calmer. She rose, and smoothed her hair and bathed her eyes. It was a most unusual luxury for her to cry, and she felt thoroughly ashamed of herself as she caught sight of her swollen features in the glass. She had a thousand things to do this afternoon; for her time was more than filled up in the service of others, and there were many arrears, the consequence of her illness, to be made up. Few, therefore, were the minutes she must allow herself to grieve for her dog. Yes, she would walk to Bewshot; it was only three miles off, and the exercise would do her good. She should meet no one there; no Sir Augustus with his sneer, no Lady Travers with her gentle, unreal smile; only those who were far more wretched than herself, and whose sympathy for the loss of her favourite, well known as her shadow, would not jar upon her.

There was a knock at the door.

"Who is it?"

"Lord Rushbury is in the drawing-room, ma'am. I told him you could see no one; but he said he must speak to you for one minute, and he was sure you would see him."

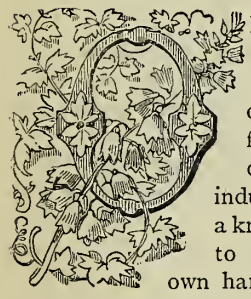
A ghost of a smile flitted over Joan's features.

"Tell him," she said, "that I will be down in five minutes."

"So they are come home," she added aloud, to herself. "I wonder what he is come for. Perhaps poor little May wants me."

END OF CHAPTER THE TWENTY-FOURTH.

SOME PRACTICAL HINTS ON PAINTED WOOD DECORATION.



IN first thoughts, it may appear to some readers that painted decorations are obtainable only by those who can employ first-rate workmen; but a little consideration of the subject may induce them, if they have acquired a knowledge of drawing, to attempt to beautify their rooms by their own handiwork; and when one part has been satisfactorily accomplished, it will doubtless lead to other portions both of wood-work and furniture being similarly embellished. It would make a long list if we were to enumerate all the articles in a house that could be thus raised from the dull common-place into valuable articles possessing real artistic beauty. To produce harmony of tone and good decorative effect is of the highest importance; both designs and paintings, however good, will be worse than useless if they do not embody these two great qualities. To paint one article without any reference to its surroundings, is in the worst possible form; it is in the harmonious effect produced when regarded as a whole that true artistic taste is shown. A heavy, sombre, dull room that children regard with awe, can be made a charming dwelling-place, if some time, labour, and loving thought be expended on it; and as to the influence a gloomy room exerts on the characters of its inhabitants, what a tale of their experiences might be written! Who of us, on the contrary, does not know what an enlivening effect a room prettily decorated and charmingly furnished has on the spirits? When we exclaim, "How pretty!" either to ourselves or to its mistress, on entering such a room, surely the brightest and best side of our nature is aroused, we are the more ready for genial conversation, and our hostess, gratified by our manifest admiration, does her utmost to entertain. For it is an undeniable fact that if our surroundings are agreeable both work and recreation are the more enjoyable. The few suggestions we propose to offer may enable some of our readers thus to transform an uninviting sitting-room into a bower of comfort and beauty. The wood-work and walls demand our first attention. The hues of both must agree—no crude colouring or harsh contrasts may be tolerated. A safe plan to follow in choosing the paint, is to take two of the most prominent tints in the paper, and match them for the paint, but other combinations are equally or even more acceptable if arranged by one who possesses a knowledge of colour. Pictures by celebrated artists will be of great assistance to any who do not feel competent to judge for themselves. It is not possible to go far wrong if cool olives, sage or blue greens are admired: so many beautiful materials have these shades for their ground-work that it is an easy matter to combine their hues with walls and wood-work. Peacock and indigo blues are more difficult to manage, but repay the extra trouble when well assimilated.

The choice of colour will depend greatly on the aspect of the room; a bright, sunny room will bear cooler, duller colouring than one with a north aspect, which will admit of brighter hues being displayed. If the walls are to be painted, soft tones should be preferred to form a fitting back-ground for pictures and ornaments. Walls done in distemper allow of charming groups of flowers, or figures in medallions, being painted on them in body colour, which is a great desideratum in houses where pictures are few; large spaces of bare walls can thus be made to add their quantum to the general effect. With a few such groups, some corner brackets, and some old china plates hung in suitable positions, the absence of pictures will not be so severely felt. A dado will give scope for decoration also. It may be of panelled wood—alternate panels should be painted with bulrushes,

ferns, or suitable flowers; only flowers growing on tall stems can be selected for this purpose, such as lilies, arums, and iris. A rich appearance is produced by the introduction of gold, when every other panel may be gilded, and the flowers represented on it. A more economical plan is to paper the walls as high as the surbase or chair-rail with alternate panels of chocolate-coloured and gold paper, then to decorate the gold ground with flowers. A wooden rail that can be utilised for holding old china plates and dishes should separate the dado from the upper part of the wall. If a room is too lofty to please the taste of its occupants, the addition of a frieze will materially alter the appearance of the height. The frieze may be from one to two feet in depth, and should be painted in a sketchy style; elaborate finish would be lost when placed so high above the line of vision; it may be either of a lighter shade than the wall colour or of a good contrasting colour.

There has of late years been a great rage for the sun-flower, but it can only be said to be a passing fancy. Though in itself a good subject for decoration, it must be used alone; no other flower will accord with it. Again, its colour is awkward to harmonise with others. Yellow at all times requires care in its application, but when employed in large masses such as the sun-flower renders necessary, it is only in experienced hands that it can be successfully dealt with. Flowers of one class should be chosen to be grouped together, that is, hot-house flowers may not be combined with wild flowers or water-plants; the magnificent and rich glowing colouring of the former will destroy the beauty of the more delicate forms and hues of the latter.

The designs having been decided on, the materials with which it is to be carried out next occupy our consideration. Oil colours should be used for the purpose, the work by their means being quickly and effectively accomplished. Panels can be procured of the artist's colourmen of any required size, the painting can then be done on an easel, and when finished, can be let into the door, or shutters. The door panels already in can be utilised as the ground for painting on, but in that case they must be rubbed down as smoothly as possible before the design is commenced. A carpenter will be able to give them a smooth, level surface.

The brushes and colours employed should be of the best; a great deal of extra trouble is incurred by the use of inferior articles, and the painting will never be satisfactory, however much labour is bestowed upon it, if the colours used are not of the best kind. The same holds good with brushes, the superior sorts lasting much longer in good condition than the cheaper kinds.

We will now give a short list of the colours which will be found most useful, and the worker can add others as he finds he requires them. It is well to bear in mind that a multiplicity of colours is very perplexing to the beginner, and does not insure a good piece of colouring in the end, unless used with great discrimination; a few colours intelligently employed will combine to produce a more pleasing effect than the most elaborate palette that can be prepared when placed in undisciplined hands. Some of our best artists have used a simple palette. The colours are as follows: Reds—vermilion, light red, pink madder, Indian red, and the lakes. Yellows—chrome yellow, yellow ochre, raw sienna. Blues—cobalt, ultramarine or French ultra, Prussian blue, and indigo. Browns—Vandyke brown and brown madder. Greens of all shades can be obtained by the mixture of blue and yellow; cobalt, ultramarine, and Prussian blue will combine with chrome yellow, yellow ochre, or Naples yellow. If a transparent green is required, it is found by the admixture of the above-mentioned blues and raw sienna. Various tints of orange are composed of yellow and red; light red or vermilion with chrome yellow or Naples yellow; raw sienna or yellow lake with carmine or pink madder will produce a transparent orange. A tube of flake white is quite indispensable. Shadow colour is formed of lake, Indian red, ivory black, and white. Mediums can be procured ready for use of the colourmen, and this plan saves much embarrassment to the beginner. Hog's-hair brushes are required of various sizes—a good many will be needed, as it is best to keep some expressly for the lighter tints, not using them for the darker colours. A badger's-hair brush, or softener, will be useful, but it must be employed judiciously, that its use may not detract from the desirable crispness and sharpness of outline. One or more wooden palettes should be procured, and they ought to be of a good size, otherwise constant cleaning will be necessary. A mahl-stick should also be obtained to prevent the chance of the hand resting on the panel.

The design having been outlined in charcoal, the shadows must be the first point of consideration; shadow colour of various strength should be used. It is well to study carefully the position and form of the shadows, that they may not afterwards need alteration. By any change of plan a risk is run of damaging their clear transparency, which is one of the greatest powers in the hands of the painter. All heaviness of shadow must be studiously avoided. Tints should be lighter than they are to appear when completed; they can be strengthened in the finishing process. The first painting should be as carefully performed as the last touches, for a slovenly commencement will never produce a creditable finish. Be careful always that not the slightest touch of colour shall be placed on the panel until there is first a clear, distinct idea in the mind of the purpose the stroke of the brush is to serve. Having found the exact tints for the local colour of the flower, lay it in and join it to the lights and shadows by means of a middle tint of pearl grey. On the well-advised use of the middle tint, much of the beauty of the painting depends. It gives roundness and solidity, softens down rough edges, and assists in adding the exquisite transparent texture that some flowers possess. But its application must not be exaggerated, or the brilliancy of the flowers will be endangered. It should not be carried too far into the lights so as to interfere with their colouring, or too far into the shadows lest it mar

their transparency. The second painting should be considered as a means of heightening the effect produced by the first, the outlines must be more carefully noticed, the shadows strengthened and the lights enhanced by scrumbling. A hog's-hair brush must be used with very little colour in it, and this is to be passed lightly over those parts of the painting that require it. The tints used for this purpose are usually opaque colours mixed with white; the tint is generally of the same tone as that used in the first painting. The object of scrumbling is to soften and cool down any parts that stand out too strongly marked, or too prominent. The shadows are not commonly subjected to this process. If shadows require more force it is given to them by glazing; the colours to be chosen are mostly transparent and are diluted with medium to such a consistency that, when applied, the first painting remains distinctly visible through the glaze. The beauty of the shadows is greatly increased thereby, but if not discreetly handled it only serves to give a garish effect that will at once pronounce the work to be that of an inferior artist. Glazing ought never to be attempted until the first painting is perfectly dry and firm, otherwise the previous lay-on will be worked up by it, and a muddled appearance will be the result. The shadows and the lights should be kept in as large masses as possible, and the strongest shadows will be found in the immediate neighbourhood of the highest lights. Shadows should not be depicted in too cold hues, especially in the representation of flowers this fault should be avoided; a little lake and Indian red will give warmth where required. Heavy, cold shadows will ruin the appearance of the beautiful blossoms, causing them to look dull and unreal, instead of enhancing the brilliant softness of their natural hues, as will be the case if they are well rendered. Dry-touching consists in improving those parts of the picture that are incomplete, by delicate finishing touches; but too high a finish is to be deprecated; if not carefully performed, it is apt in unskilful hands to degenerate into a weak striving after smoothness, whereby much of the force and intention of the first conception is lost. Mr. Ruskin gives us most valuable advice on this point. "The fact is that both finish and impetuosity, specific minuteness, or large abstraction may be the signs of passion or its reverse; may result from affection or indifference, intellect or dullness. Some men finish from intense love of the beautiful, in the smallest parts of what they do; others in pure incapability of comprehending anything but parts; others to show their dexterity with the brush and prove expenditure of time. Some are impetuous and bold in their handling, from having great thoughts to express which are independent of detail; others because they have bad taste or have been badly taught; others from vanity; and others from indolence. Now both the finish and incompletion are right where they are signs of passion or of thought; and both are wrong, and I think the finish the more contemptible of the two, when they cease to be so." The artist can call yet another process to his aid, to promote the further perfecting of his subject; but, like glazing, it will injure rather than improve the representation if too freely employed. By the term loading is understood the laying on of colours in a thick state on the high lights, causing them to rise above the general surface and thus to receive greater illumination and stronger reflected lights.



DESIGN FOR A DADO PANEL.

The texture of the petals of the blossoms should be as far as possible truthfully interpreted. It varies so considerably in different flowers, that the beginner will find here a serious obstacle to overcome, still on its faithful delineation much of the naturalness of the pictured form will depend. The shadows and reflections to be found in a white flower allow of the

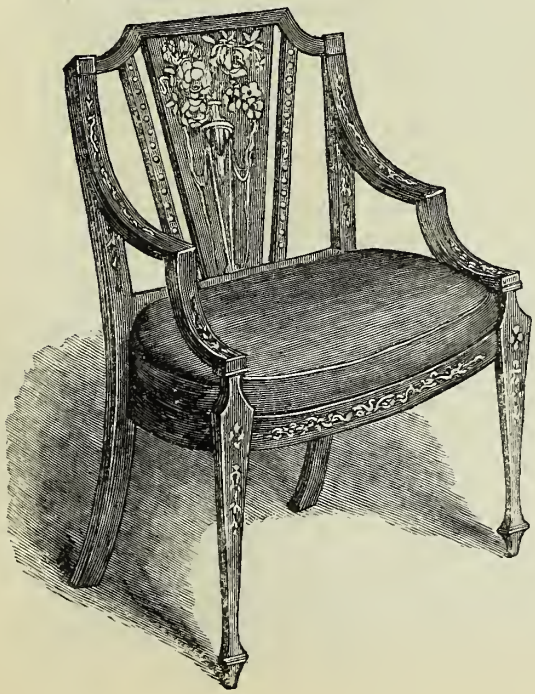
introduction of many exquisite tints. Red, blue, yellow, and black may all find a place on the palette when mixing the tints for giving the reflections. The artist who can paint from growing flowers, or from blooms freshly plucked before the heat of the sun has had time to cause their fragile beauty to fade, has an indescribable advantage over one who takes for his copy a "flower-piece," even though it may have been executed by a celebrated artist. Nature never has been, or can be, rivalled; the graceful form, the glorious colour, the innumerable tints found in the simplest flower that grows, as far excel any human work as does the sun the most brilliant artificial light.

With ferns for subjects, beautiful sketches can be composed for decorating the drawing-room or the boudoir. The choice is so large, the forms and sizes of the fronds so various, that little difficulty will be encountered in drawing a suitable design for any article. The colours of ferns never clash one with another, heavy and feathery kinds can both be introduced into the same piece without detriment, and the golden and silver ferns will afford much additional beauty as well as variety. The heavier fronds should always be placed in the lower part of the panel, the lighter specimens will fill in the upper; thus, in the accompanying illustration, the walking-leaf fern, that reminds us of our common hart's tongue, but greatly elongated, gives force and character, and serves to throw up the more delicate fronds that cross and intermingle with it. The fronds should be of a dark green in colour, the younger leaves will be of a paler shade; the stems are green and succulent. The fronds of this fern grow to a great length, and then droop downwards towards the earth, and at the extreme end of the long narrow point will often be found



a young fern growing in a perfect condition. The large, serrated five-rayed fronds may be greatly varied, and will provide the artist with the opportunity of giving some beautiful effects. The under part of these fronds is powdered over with a wax-like substance, that varies in colour from a whitish tint to a pale yellow, and again, from a rich golden colour deepening to orange. If full advantage be taken of these shades a lovely combination of hues will be produced. The upper side is of a darker tint of green; smooth, but not shining. The stalks should be represented of a dark brown colour. The third specimen that finishes the panel will have bluish-green fronds and chestnut-brown stems. Should the remaining space left uncovered be too great, it can be readily filled in with a few fronds of maiden-hair fern, which is too well known to need description. Its elegant feathery appearance will lighten any design that would otherwise prove too heavy; but, as a rule, panels should not be entirely covered; over-crowding will defeat the artist's object, namely, that of decoration. For a dining-room door many propositions could be offered.

A handsomely carved wooden mantel-piece is a thing to be greatly desired, but one made in a plainer style will supply its place successfully, if a little painting be inserted in lieu of carving. A running floral design may be chosen, or a set pattern may be used as preferred. The divisions should be filled in with bevelled glass, with the exception of the centre one, which may contain a picture. A head shows to the best advantage; either a Roman or a Grecian profile is suitable, or, as our illustration shows, a head surmounted with some kind of old-fashioned head-gear, such as was commonly worn in the sixteenth century.



The chair of which we have given an illustration is copied from one belonging to an antique drawing room suite. On the back is painted a golden vase, clasped round with pearls and decorated with pale blue drapery, which contains pale blush roses, a crimson dahlia, white clematis, and blue convolvuli. The two upright

bars are painted to imitate pearls, while the outer supports of the back bear a design of clematis blossoms. The arms and legs are ornamented with white berries and leaves. On the front of the seat are roses and clematis, connected in the centre with soft-hued pink ribbons. For decorations of all kinds it is best to use large brushes, for they encourage the artist in the habit of working in a broad, free style, which is most desirable. Nevertheless, broad strokes are not necessarily the consequence of the employment of large tools, but are dependent also on the manner of using them. A clever artist can produce minute work with a broad brush, but it is the result of long practice that enables him to do so. Dürer was celebrated during his lifetime for his method of painting hair so as to appear peculiarly fine and soft. Alluding to his success in this respect, Giovanni Bellini once expressed a wish to possess such a pencil as Dürer was in the habit of using. Dürer at once handed him several of various sizes to choose from, at the same time telling him that he could work equally finely with any one of them.

A BUNCH OF ROSES.

BY THE REV. M. G. WATKINS, M.A.

ROSES, while all your beauties cloy,
Grief, tyrant-wise, oft smothers joy;
June's cherished blossoms, red, pink, pale,
Whose perfume faints on every gale,
Your thousand charms my heart should glad,
And yet—your fragrance leaves me sad!

Thou, blushing bud, of hope rich queen,
Thy promise type of me had been
Last summer, when beside this gate
We stopped—what time his patient mate
Eve's minstrel solaced—and my heart
I gave, and vowed nought love should part.

But thou, poor cankered rose-bud, killed
With insect-guile, typ'st hopes now stilled;
Affections blighted, trust once slain
By cold neglect, ne'er bloom again;
With careless scorn and absence tried,
My love, like thee, has shrivelled, died!

Ah, full-blown rose! some happier maid
Thou'd grace, within dark tresses laid;
The fullest depths of tender love
Glow in thy lustre; throned above
Her radiant eyes, thou'd well express
How trustful beauty blessed can bless!

GARDENING IN JUNE.

ONCE again we find ourselves in the full tide of summer enjoyment. We have parted with the month of May, which even at its best and brightest always makes us poor gardeners a little nervous as to what may follow after a day of uninterrupted sunshine; nor do we forget that even the strawberry-blossoms, now in such luxuriance, have before this been made to look of a dirty-white when surrounded—though it may be only for a very short space of time—by the whiter snow, the final effort of a winter that always seems so loth to leave us and so glad to come back to us again. But now that we have entered upon the month of June, we take heart and go boldly on with the full determination to enjoy the flowers and the fruits in their season, and to make the most of the golden third of the year upon which we have just entered.

Now, as we have so often remarked before, the great secret of successful amateur gardening is not merely unremitting labour with our hands, but unremitting foresight as well. We must look ahead, use our brains and think of the future. And perhaps a repetition of this very commonplace caution is very expedient just now, when we are doubtless still, and have been ever since the third week of May, exciting and engrossing ourselves over the laborious and tedious process of what is popularly called "bedding-out." We are so eager to complete the transformation scene in these hitherto dark and leafless mould-heaps, that look so desolate in their little artistic circles and squares scattered over the lawn. Perhaps we are not unfrequently single-handed, and we begin to calculate how many half-miles we have trodden between our little greenhouse or pit in the back garden and our now half-dressed lawn in the front. We discover that this bedding-out takes up an incredible amount of time, and begin to feel some uneasiness and alarm lest we are neglecting other portions of our pigmy estate. We shall, then, this month say little more about bedding-out, save only to remind the rash or incautious to begin with the hardiest flowers, to have an eye to the combination of colours, to peg down many of the plants when once bedded-out so as to encourage them



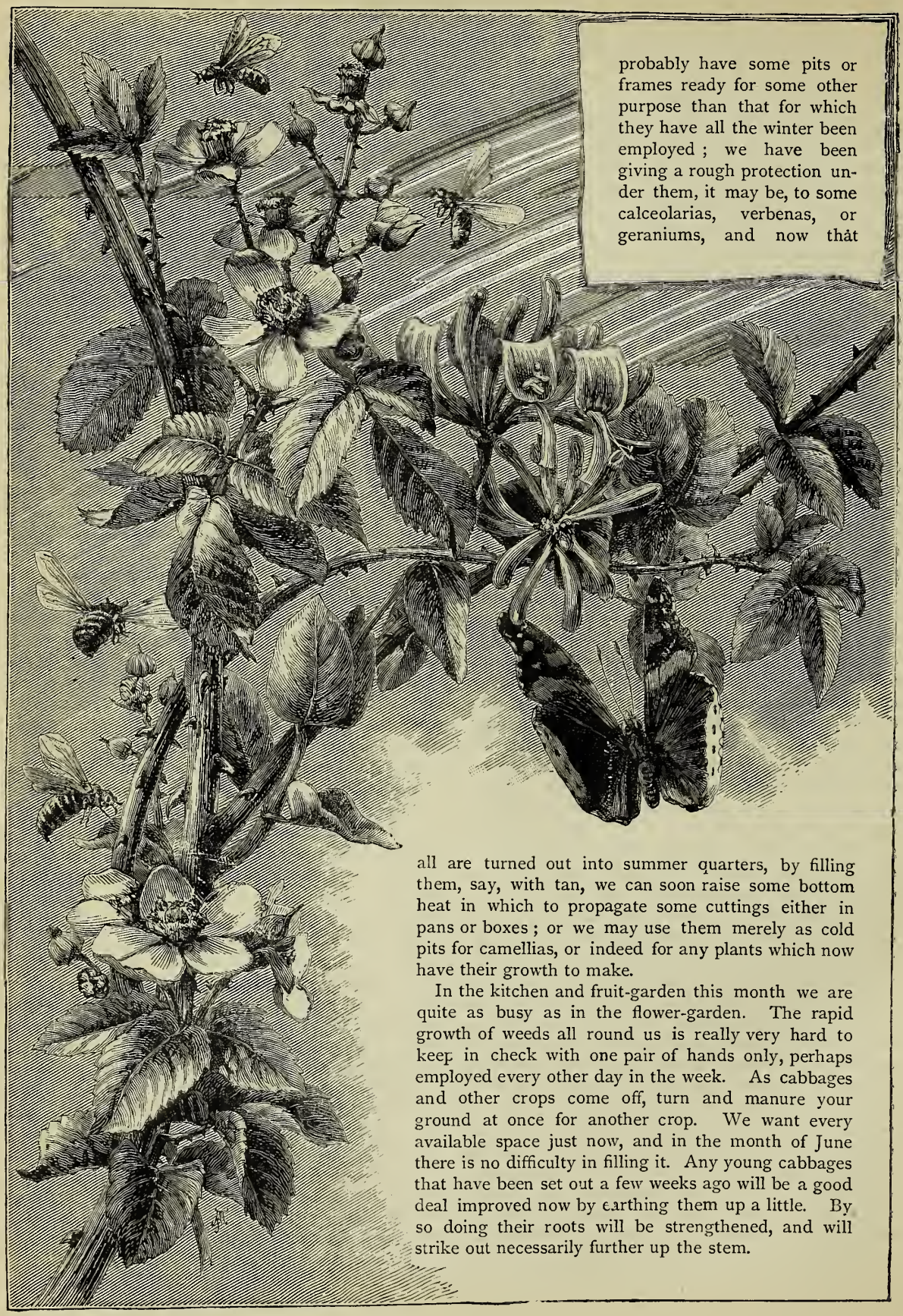
"JUNE'S CHERISHED BLOSSOMS, RED, PINK, PALE,
WHOSE PERFUME FAINTS ON EVERY GALE."

"A BUNCH OF ROSES" (page 402).

all to attain a uniform height, and to give a careful watering. And perhaps while so engrossed over this bedding-out we are, though perpetually treading over our lawn, forgetting to pay attention to the lawn itself. It is very rapid in its weekly growth, and must be kept constantly back by the mowing-machine. We shall find, too, that all the edges of the lawn that border either upon the bed or the gravel walk want clipping closely and evenly. The lawn, in fact, must have its weekly "clean shave," or it will get beyond you. If you allow it to go too long uncut and untrimmed it will, even when the process is at length gone through, look yellow and lumpy and coarse, and will very much resemble a field from which the hay has just been carried. This said, then, let us follow up our own suggestion and pay a little attention to flowers on which we depend for our autumn display—such, for example, as dahlias. We have had them in the early season of the year struck in heat, from which, however, we must recollect that, although it may be even the end of May, it would be madness to suddenly plant them out in the open in the places in which we intend them afterwards to bloom. The very wind would of itself cause them to droop. When they have well struck, they should be placed in cold pits for the purpose of hardening them off, and from the May frosts they will very likely want some protection. Those who even at this time of the year walk round any ordinary flower-garden, cannot but have noticed at times fine and once promising young dahlia plants all shrivelled up from too sudden exposure to the open and exposed changes of our temperature. No matter, then, how fine the weather may be up to the very end of May, do not plant out your dahlias direct from your forcing-pit. Your seedlings, too, must be similarly hardened off. After the hardening-off process your dahlias may in favourable weather be planted out. But do not trust to one planting. Indeed even by the third week of May, if your hardening-off has been thoroughly well gone through, you might perhaps begin your planting; but the seasons, we fear, are not quite what they used to be, and we are no advocates for impatience in a matter of this kind. It is a good plan, too, to plant out once in ten days or a fortnight until you have got out your whole stock, so as by this means to have different seasons for bloom. Should you be partial to dahlias, and have a good quantity of them, plant out your seedlings a foot apart in the row and allow for some two feet between the rows. Our great enemy among the dahlias is the earwig; and it is far best to begin watching for and trapping them early in the year, instead of waiting till your flowers are on the point of blooming. As with the wasps, so it is with the earwigs, the more they are destroyed early in the season the better for your garden. The slug, too, is rather partial to the dahlia when it has just been planted out; perhaps the old remedy against this nuisance is a little lime scattered about or around your plants. The old-fashioned earwig-trap cannot be surpassed. Get quite a small flower-pot, put a little moss or dry grass in it, and stand your pot topsy-turvy on the stake to which your dahlia is tied, or a few bean-stalks may be laid in and among your plants. The earwig loves to conceal himself, and, like the slug, he prefers the darkness for his depredations, and an examination by candle-light will often surprise him. But an early-rising gardener can also capture the thieves before they retire again into obscurity. One good night's feed among the florescence of your dahlias will completely spoil the shape and beauty of the bloom. And so it is also with any roses among which that terrible little scourge the maggot loves to dwell. When about to plant your dahlias out, drive your stake first of all well into the ground for each dahlia, and dig the small holes afterwards in which to plant the dahlias themselves. Your soil ought previously to have been manured, or at least, if it has not been, put some rotten dung or some leaf-mould in at every part in which you are about to plant out. Should, however, your ground be quite fresh—such, for example, we mean as a newly-made bed on or at the border of your lawn from which the turf has just been removed—no manure, or little if any, will be required. But in this case of new soil look out for grubs as you turn your soil over, for a good supply of grubs will in an incredibly short space of time make short work of young dahlias.

Your early spring flowers, such as polyanthuses or primroses, which it may be you have had blooming in pots, but which you may wish to preserve or to plant out, should by the end of May be planted out in shady situations. If they are large plants, part them, taking care first of all to shake out the earth. They want a fairly rich loamy soil. If you do not wish to part the roots, but merely want to plant out the whole plant, simply take the ball of earth from your pot and put it in as it is. Water afterwards, and if there be any fear of slugs, draw a little circle all round your plant and fill in with some lime. Indeed among our shrubberies, or on the north and bleak or sunless side of the garden, these flowers are a great consolation where perhaps we find it difficult to rear other and more deilcate flowers. And now among our rose-stocks preparation may be made for budding, and for the purpose of adding strength to those branches of your stock upon which you next month intend to bud, cut away all other branches. Should you also before using your knife notice that one small branch looks more vigorous and stronger than the others, be sure and keep that one for your budding purposes, as although you were to bud upon any of the others, the strong shoot in question would still run away with the best of the strength and sap of the stock, even though you had cut it short. Budding indeed may be commenced by the end of this month, that is if the season will allow of it. First, hot weather, then a good thunderstorm, then a gloomy and cloudy morning; this last day is your budding day. All depends nevertheless on the condition in which your stocks are: if their bark rises well and easily the buds will take well.

After our bedding-out is completed, we shall very



probably have some pits or frames ready for some other purpose than that for which they have all the winter been employed; we have been giving a rough protection under them, it may be, to some calceolarias, verbenas, or geraniums, and now that all are turned out into summer quarters, by filling them, say, with tan, we can soon raise some bottom heat in which to propagate some cuttings either in pans or boxes; or we may use them merely as cold pits for camellias, or indeed for any plants which now have their growth to make.

In the kitchen and fruit-garden this month we are quite as busy as in the flower-garden. The rapid growth of weeds all round us is really very hard to keep in check with one pair of hands only, perhaps employed every other day in the week. As cabbages and other crops come off, turn and manure your ground at once for another crop. We want every available space just now, and in the month of June there is no difficulty in filling it. Any young cabbages that have been set out a few weeks ago will be a good deal improved now by earthing them up a little. By so doing their roots will be strengthened, and will strike out necessarily further up the stem.

Brussels sprouts and broccoli, too, may be pricked out now and put in some six inches apart. Succession crops also, such as peas and spinach, should be sown fortnightly. Sow your turnip-bed fairly early in the month, after rain and in a good rich soil. The potatoes will require careful earthing-up, as recollect that any which are exposed to the air, or even any which are rather too near the surface, though they may be concealed from view, are useless afterwards for any purpose in the kitchen. Those thus neglected can only find their way to the pigs or be preserved for sowing next season. We have seldom said much about our herbs. It is a great mistake to gather them for drying when the summer is very far advanced, and when most likely they are positively in flower or seeding. By the end of August they get long and coarse and straggling. Why not gather some by the end of June, when they are young, in full leaf, and full of vigour? Dry them afterwards where they can be protected from the weather, but they like some air. Careful and regular attention must be paid to the cucumber and melon-frame: neglect to open and close the frame morning and evening, or to give some protection from the full rays of the sun upon your glass in the greatest heat of the day, might involve the destruction of your plants; and unhappily a single day's carelessness, or an excuse for a holiday, will do all the mischief. Your wall-fruit also will want thinning this month, wherever it has set too thickly. A good deal of neatness, discretion, and care is needed in this operation, as you may, if too rough or impatient, break off a whole bough or, at any rate, more fruit than perhaps you at first intended to remove. Take care also what vegetable crops you allow to grow on the border near your wall-fruit. Select only those that are light growers and that make but small roots, that do not grow high so as to shade your wall from the sun and prove simply fatal to your wall-trees. The best to sow along here, then, are lettuces or French beans or your mustard and cress—anything, indeed, light; dwarf peas might do no harm, but particularly avoid any vegetable that quite covers over the soil, or any strong and exhausting things, such as horse-radish or your beet-root and carrots.

And next probably our old trouble will return upon us, the gooseberry and currant caterpillar. Their presence is particularly annoying when we see the promise before us of a good and large fruit crop. In this case it is certainly worth extra pains to try and be rid of this pest, for although the caterpillar devours the foliage alone, yet the fruit, when the foliage is destroyed in this terrible and wholesale way, can never come to perfection or ripen properly. Try every remedy, a little soot or lime, and if you can possibly find the time for it, careful hand-picking of the caterpillars. It is risky shaking your tree to get them off, for they only crawl away elsewhere; and yet by contriving to place a few pieces of board on the ground first of all under your tree before you shake it, so that you would more readily see the caterpillars on the boards than you would if they fell upon the earth, it might be worth while attempting to destroy them in this way. By lifting the leaves gently and searching underneath you will generally find a whole family hard at work, and that work generally is dinner, dinner from morning to night.

We have hardly space this time to say much of our vine and our greenhouse. Much is, of course, necessary to be done, but more particularly to the first-named, the checking of its luxuriant advance in all directions by pinching off useless shoots: this requires seeing to almost every other day.

Half of our year's tale, then, is already told, and let us hope that a prosperous season and an abundant harvest will shortly be in store for us.

GARNERED.

"The harvest of a quiet eye."—*Wordsworth.*

OH, unlived lives that pass away
In dark of night and light of day,
Whose dreamless hearts no music find
In southern breeze or northern wind;
Who know each bird and flower by name,
Yet find their language all the same;
Ye lose a sweet world ever nigh—
"The harvest of a quiet eye."

In spring's first smile, in summer's glow,
In autumn's rain, in winter's snow
That shrouds the dying year and gives
A cradle to the one that lives,
In simplest things is scattered round
A world of beauty, thought and sound,
For those that reap in passing by
"The harvest of a quiet eye."

Ah, blessed friends that ne'er grow strange,
And happy world that ne'er will change,
You seem to weep if we are sad,
And gaily laugh if we are glad;
Your language is in every tone,
You make a thousand dreams our own,
If we can reap with smile or sigh
"The harvest of a quiet eye."

REA.

A PASSING ACQUAINTANCE.



"WELL?"—"Well, it's quiet enough here certainly; don't you feel already as though you could enter into Robinson Crusoe's feelings as you never did before?"

We two were standing in the misty April twilight, in a tiny north country station. It was Saturday evening; the train from which we had just descended was fast disappearing in the distance; there was only one solitary human being visible, a dejected-looking porter, who surveyed us and our tickets doubtfully, as if he thought our getting out at all had been a mistake. Cabs seemed utterly unheard of, and there were six miles of moor and heath still between us and the Pike Hotel, which Tom had decreed was to be our head-quarters. "We can't walk and carry that thing," he remarked, with a scornful glance at the bulky old portmanteau lying at our feet. "I'm sure there was some kind of bathing machine here the last time I came."

"Aye," answered the porter, "but that belongs to the 'Pike' people, and they only send it to meet the midday train. They've got a sort of gig at the Stanley Arms down yonder, though it's a chance if the horse is not away at the ploughing."

"We must go and look him up then," decided Tom promptly; "can you carry that down? make haste then."

The Stanley Arms was by no means the dignified pile its name implied: a dingy insignificant inn, with a doorway that seemed to have been designed for the use of dwarfs only. The landlady came to it and surveyed us.

"Yes, the horse is at home," she said, "but he wants a feed; and wouldn't ye like a cup of tea? there's a long spell before ye."

There was a long spell behind us too, and that tea, with the brown bread and country cream, was not a thing to be lightly forgotten. While we drank it the landlady told us about another traveller to the "Pike," who had called in an hour before—a little, plain, bad-tempered gentleman in blue spectacles—and she didn't think we should find any one else there; the season had not properly begun yet, we were a great deal too early to see the real quality.

This was gratifying. Further information on the matter was cut short by the appearance of a tall, yellow, creaking chariot before the window. It had been her husband's father's, when he was first married, our hostess told us with much pride; and it was quite a family "relict."

Evidently, and we regarded it in silent astonishment for a full minute, before we cautiously climbed up behind the ponderous animal in the shafts. Judging by his maneless and tailless condition, he also must have commenced his career about the same time as the "relict."

It was the first time I had ever been so far north, and the "Pike" was far out of the regular tourist track. I have been there many times since, and tramped over almost every hill and dale of it, but to this day the broad north country names carry me back to the chilly spring evening I saw it first: the dark hills, and wide bleak moors, the watery yellow gleam in the west where the sun had gone down, and the soft misty rain in our faces, as we jolted along the uneven road.

"There is some one else on pilgrimage to the 'Pike,'" Tom announced from the box-seat when we were about half-way, "possibly the first instalment of the distinguished crowd who will follow in our track."

"Or possibly the little, plain, bad-tempered gentleman in blue spectacles," I suggested; "this one is little enough in all conscience."

Presently we caught a vision of the spectacles, when he turned his head at the sound of the wheels behind; that decided the question, and Tom, telling the boy to draw up, politely offered him the fourth seat in our chariot. We had been in possession of it for above half an hour, and were beginning to feel a sort of pride in its peculiarities, and the knowledge of its being probably the only remnant of its species extant. That evaporated utterly before the stranger's amazed look; it expressed anything but admiration. However he accepted our offer, and handing up a small knapsack, a large fragment of spiky granite, and a square glass bottle confining some unpleasant-looking spiders, he ascended to the vacant seat, where Tom and he straightway entered into a conversation about the cross-roads, that lasted till we reached the end of our journey.

A big, rambling, grey stone house, at the foot of a long sloping stretch of stony moor. It was too dark to see anything but the bare outlines. We stood a minute at the door to listen to the stream plashing through the knot of pine-trees in front, then a little landlady appeared, and welcomed us right joyfully—her first visitors this season, she told us.

Half an hour later I strolled into the long dining-room in search of supper. The only light in the room came from the blazing wood fire, it flickered cheerfully on the uncurtained windows and cast long shadows on all beyond. Tom was standing on the rug before it, thoughtfully regarding a huge cheese on the table.

"That is something like a cheese," he observed, "you would not find a piece that size in a city hotel."

"No—Tom," I went on confidentially, "do you think the little, plain, bad-tempered gentleman is going to be an infliction?"

"Hush! can't you?" said Tom sharply, and then horror and consternation fell upon me as I caught the gleam of the blue spectacles from the corner beyond. He came forward into the light, and Tom hurriedly stumbled through a sort of introduction: "Dr. Blake, of St. Aidan's; you remember, Ambrose?" I didn't, but said I did, and subsided into a remote chair as speedily as possible. From the doctor's face it was impossible to gather how much of the allusion he understood; his manner was frigidly polite, and I hoped against hope that his ears might prove to be no keener than his eyes.

The next day was Sunday—Easter Sunday—a lovely, clear, bright morning. Tom and I had been early trained to the conviction that church was the only proper place on Sundays for all well-conducted people; there was one not more than four miles away, so accordingly after breakfast we went forth to find it.

I am afraid we made many digressions from the paths of piety that morning; I know we made divers excursions up hills that we had no reason to believe lay in the direct road, to watch a distant train winding in and out of the glens, and the great cloud-shadows sailing over the moors; and that the congregation, consisting chiefly of school-children, and a clerk who greatly magnified his office, were just composing themselves for the sermon when we finally reached our destination.

An uncomfortable, time-worn, decaying little place it was, with deep box-like pews that swallowed up the said congregation entirely when they sat down. It seemed to be also used as a kind of winter store-house; there was a faint scent of apples and onions in the air, and we counted several sacks of corn at the back; but the waving pines brushed the narrow windows, and somehow, under the shadow of the great hills, the old story of the Resurrection came to us with a deeper meaning than it has often had in grand city churches since.

The service ended with a very long metre hymn, given out and sung as a solo by the indefatigable clerk. Standing up for it, we discovered Dr. Blake's shining bald crown in a neighbouring pew, and wondered why he had not mentioned that he was coming. He joined us in the porch after, and we walked back together.

"I asked that clerk how long the curate had been there," remarked Tom, breaking a long silence; "twenty-seven years, he says; it's half a lifetime; just think of it in a place like this!"

"I wonder if he ever goes into any towns or cities, and how things look to him," I speculated; "if he feels above or below other people, because he is out of it all, or if he has come to consider that the crops and the weather are the two really great facts of life."

"Your great namesake lived out of the world longer than that, Mr. Ambrose," observed the professor curtly, "without altogether descending to those two items."

"I'm afraid I don't know much about him," I returned—"but it surely doesn't mean to rain?"

But it did. The great white clouds suddenly descended in a tempest of driving rain, that promptly banished all speculations but the one of getting home as quickly as possible; and except for a short stroll under the wet pine-trees at sunset, we stirred out no more that day.

I was lounging at the window the next afternoon, counting the big drops in a puddle underneath, when a conveyance made its appearance on the crest of the hill, and slowly lumbered down the steep road in front. I put in my head.

"Tom, come and look at this; it's almost as antiquated as our 'relict.'"

Tom and Dr. Blake sauntered across the room with an assumption of lofty indifference; it disappeared at the first glimpse.

"Why, that's the bathing machine from the station," cried Tom in joyful recognition; "who can be inside it?"

A few minutes more and it staggered up to the doorway, and two ladies descended from it, one a widow—mother and daughter evidently. Fair, tall, graceful women both; but the daughter was more. I thought that day, as I think still, that it has been given to few men to know a grander, sweeter face—or woman. They came quickly up the steps together, not without an astonished glance at the three heads eagerly stretched out from the upper window.

They were drawn in on the instant. "What will she think of us, staring at her like a lot of schoolboys?" ejaculated Tom, red with confusion.

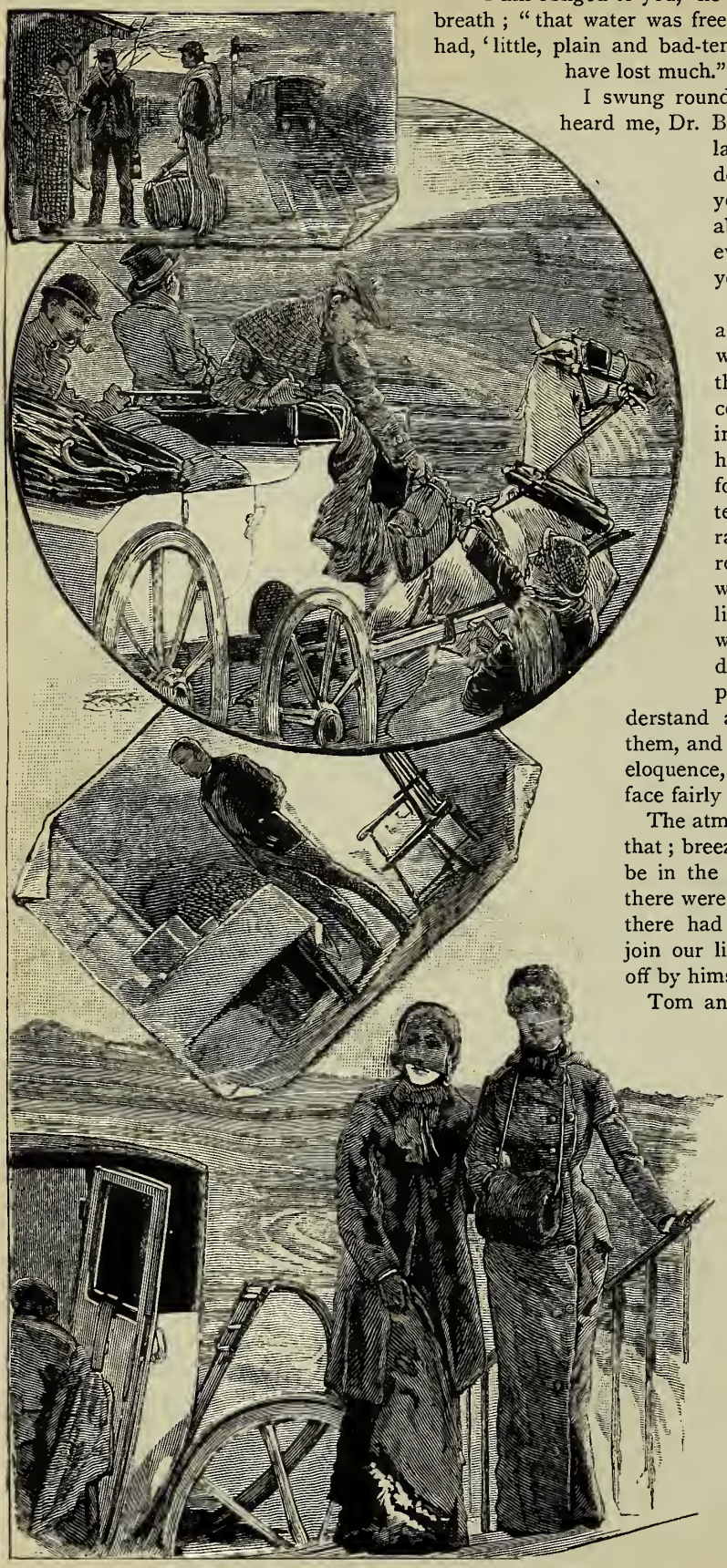
"The mother, do you mean?" inquired the professor, going back to his book.

Tom sat down, a shade redder than before.

Mrs. and Miss Reed, we heard they were before we went down to tea, where they occupied the opposite seats at table, and gave an entirely different aspect to the room, and a different tone to our conversation too; we found ourselves unconsciously airing our loftiest views for the benefit of the new-comers. They listened very calmly.

We made a pleasant little party at the "Pike" now, though before many days had gone by I had decided for myself that the little professor was going to be a serious infliction. Clever, appallingly clever, dogmatic—and no man is worth much who is not, upon some points at least—he was also intensely irritable and irritating, and it seemed to me that his sharpest, most aggravating remarks were reserved for my edification.

By the end of the next week that explained itself. At the other side of the pine-wood, the stream gathered up all its force into one deep fall, the boulders below were polished like glass with the constant friction. Taking a short cut back one afternoon, I found the professor, who had gone out after his beloved spiders, helplessly slipping about among them, drenched and miserable; it was no easy matter to drag him up the bank, but he stood there at last on firm ground once more.



"I am obliged to you," he gasped, as soon as he recovered his breath; "that water was freezing the life out of me; though if it had, 'little, plain and bad-tempered,' I doubt if the world would have lost much."

I swung round sharply. "There, I was sure you heard me, Dr. Blake; it was not my idea at all: the landlady at the 'Stanley' had been describing you to us before we saw you; how could we know anything about you then? I have been sorry ever since for repeating it, but I hoped you didn't hear me."

"Very kind of the landlady," was all the professor's response, and we walked back in unbroken silence. At the door he suddenly asked me to come into his sitting-room that evening, and there in proof of forgiveness he brought out his collection of beetles for my special gratification, and I listened respectfully to his account of the rarity that seemed to be their chief recommendation, though an occasional wish would arise that they had been a little rarer still. The only advantage was that Miss Reed came and sat down beside me and listened too, with profound interest; she seemed to understand and enter into his feelings about them, and the little man broke out into perfect eloquence, and talked till his small withered face fairly glowed over his subject.

The atmosphere cleared up considerably after that; breezy to a certain degree it would always be in the professor's neighbourhood, but there there were stray bursts of sunshine with it, that there had not been heretofore, and he began to join our little expeditions, instead of trudging off by himself.

Tom and I laugh still at the remembrance of some of them; notably one when he took us a long way round to find a sheltered stream that he said was good for ferns. Miss Reed was anxious to have some particular kind, consequently it was our chief aim to distinguish ourselves by collecting as many as possible. Unfortunately the professor's stream proved to be good for something else also, and we went back with one ragged fern, and a fine collection of young frogs in every known stage of development.

There were pleasant days too, when he would talk to us about the common wayside things that we should have passed by as too insignificant for notice, making us feel that nothing on God's earth was low enough for that. His learning had not stranded him on

the blank shores of scepticism, as it has too many great minds ; and what he could not comprehend, he trusted, shrouded in reverent silence, to higher hands.

And here I must make one confession : Tom and I had both fallen in love with Mary Reed. I learnt "Lady Geraldine's Courtship" by heart in those days, and composed verses to her by the score ; in that one gift lay my only chance, for Tom was far beyond me in all other respects, and never was he handsomer to look upon, or kindlier in his ways, than in those few weeks.

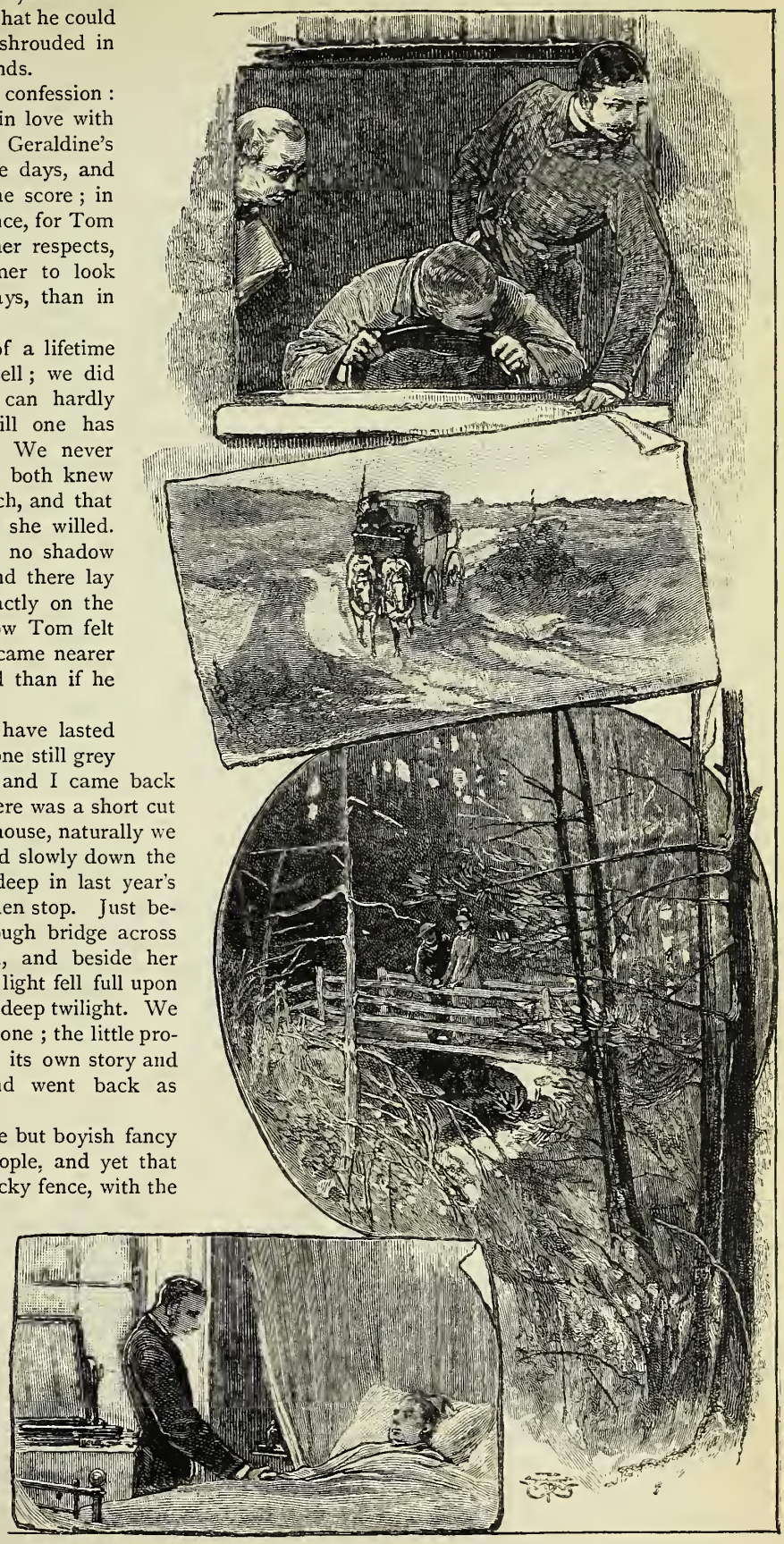
Whether it was the love of a lifetime with either of us I cannot tell ; we did not doubt it then, but one can hardly speak surely of anything till one has come to the last chapter. We never mentioned her name, but we both knew that she filled the day for each, and that it was glad or otherwise as she willed. To do her justice, she made no shadow of difference between us, and there lay the sting of it ; we were exactly on the same level in her eyes. How Tom felt about it I never knew, but I came nearer to hating him at that period than if he had been an utter stranger.

This state of things must have lasted about three weeks, and then one still grey evening it chanced that Tom and I came back from our fishing together ; there was a short cut through the pines near the house, naturally we always took it ; as we loitered slowly down the narrow winding path, ankle-deep in last year's "needles," we came to a sudden stop. Just beneath us, leaning over the rough bridge across the stream, was Mary Reed, and beside her Dr. Blake ; the faint western light fell full upon them, and left us shrouded in deep twilight. We heard no words and needed none ; the little professor's transfigured face told its own story and hers. We turned away and went back as silently as we had come.

We were young, it would be but boyish fancy in the eyes of most wise people, and yet that hour, while we sat on the rocky fence, with the unheeded fish lying at our feet, was not the easiest we have had to bear.

"I never thought of the professor coming out like that," I said at last with a miserable attempt at jocularity, "he's so old—so different to her."

"Nor I," responded Tom heavily, "but he's a cleverer man than we shall ever be ; it's of no use looking blue about it."



And so after a time we got down from our perch and went in.

There was no immediate call upon our fortitude and forbearance; Miss Reed sat working beside her mother's sofa, and looked up with a pleasant inquiry about our success. The professor was sorting dead butterflies under the lamp, and never looked up at all. We were not to be admitted into their confidence, that evening at any rate. Nor for many after-evenings, and as the days slipped by, we could almost have fancied that minute under the pines had been a mistake—almost, except for the light on the professor's face, and the increased tenderness he extended to all the living, creeping things that crossed his path.

We went out as usual, the four of us; for Tom and I were not too proud to skulk in their shadow, to listen to the professor, and under the spell of his eloquence we were fast beginning to regard our own superior stature and physique with a kind of scorn, seeing how entirely he was lifted above all consideration of such outward details.

The first of June: the summer had come at last, and on the morrow our little quartette was to break up, and two of us set our faces southward again.

There was one distant hill we had never climbed, and with one accord it was agreed to spend this last evening on the top. It was a longer walk than we had quite counted upon, and half-way up we halted to rest on the edge of an old disused stone-quarry. The sight of the rocky strata roused all the professor's enthusiasm; standing on a boulder, his little, worn, happy face turned to the setting sun, he was holding forth in no measured terms on the character and formation of the granite.

He broke off in the midst of it to watch a great brown bee that had tumbled into a tiny pool on a ledge of rock just below. We watched him with amused attention as he leaned over and stretched out the palm of his hand for it to cling to, and then—something gave way, and he was gone!

He was lying on a mossy slab when we went groping in; and Mary Reed knelt down with one great sob and took his head on her arm. It was a sorrowful little procession back in the darkening twilight; we carried him between us, hardly sure if the busy, active brain were not silenced for ever. Clasped tightly between his fingers, as we laid him down in his own room, we saw the crushed brown bee.

But he did not die; there was a week of anxious suspense and then all danger was left behind. "There will always be a slight limp," the big surgeon who came down from Carlisle told us, "but at his age that is not of serious consequence."

"Of no consequence except to himself," Miss Reed amended proudly.

"No," put in Tom; "if the professor lost every one of his limbs, he would be himself still, and above us all."

We went into his room to say good-bye a day or two after; our presence was not essential to his recovery, and there was no need for us to remain any longer.

"Good-bye," he said cheerfully, holding out a thin brown hand; "notwithstanding all our blunders and disasters it has been a blessed time. Haven't you guessed, either of you, how much I have found here?"

"Yes," answered Tom very gruffly, "we did guess, and nobody's gladder than I—we both are about it."

"Ah!" loftily remarked the professor, settling his head on another corner of his pillow, "you are much too young to understand anything about such matters; in another ten years or so you will be better able to appreciate the difference that makes in a man's life."

"No doubt," was the grim response; "good-bye."

* * * * * *

Only a passing acquaintance. We see the professor's name as lecturer occasionally in the morning papers, with half the letters of the alphabet attached; once or twice we have caught a glimpse of Mrs. Blake's fair face in the distance; but when Tom and I talk of our bygone adventures and mishaps, we keep silence always about that.

ON NIGHT-WORK AND LONG HOURS.

BY A FAMILY DOCTOR.

THE tendency of life—using the word in the very broadest sense—is an upward one. At all events, that is my hopeful view of it. I speak as a physician, and should be sorry indeed to trespass an inch on the sacred province of preacher; but I humbly opine that man is naturally inclined to seek the light, just as trees and shrubs grow towards the sunshine—to seek the light and to seek the good, even although he be burdened with sin, and entangled in a web of adverse circumstances. Man *must* advance, retrogression with him is impossible, he never could again become a savage; and, though thrown upon a desert island, with but few resources, he would only commence at once to better his condition, and make the very best he could of life. Even for this world, gloomy and tearful though we ofttimes find it, there is a glorious future in store, when knowledge shall be universal, and good triumph over evil. "Life is a jest," says Gay; verily this poet is wrong, for life is "real" and very "earnest." "Life," says Shakespere, "is as tedious as a twice-told tale." All upward paths are, to a certain extent, tedious, but there are many sweet resting-places even in life's journey, and none the less sweet are they in that we have had to

toil to find them. We hear a deal about the mystery of pain; what if, after all, pain were put into this world to help and not to hinder man in his upward way? We do much to avert it, we even live better and more regular lives to keep it at bay, and by so doing not only benefit ourselves individually, but brighten the pathway of those around us. It is the earnest desire, I believe, of every one of us to lead happy lives, and to die painless deaths; and it is, alas! only too frequently the fault of the individual himself that these wishes are not realised. The lives of those who have studied the economy of nature, and obeyed her simple laws, are eloquent in the extreme, and their deaths none the less so. And the lesson to be learned from them may be embodied in a few words: "As ye live, so shall ye die." I could bring before the reader hundreds of instances of people who have lived to a goodly old age without ache or ill, and passed away quietly at last, but I know of no case of an individual who has willingly and wantonly trespassed against nature's laws without suffering from it in this life.

Now my readers know well the kind of intemperance I am always trying in words to condemn. There are a thousand different ways of being intemperate, besides in eating or drinking too much, and each one of them leads to eventual pain, and shortens life. One may be intemperate, and sadly so, in his pleasures, innocent enough though they may be; intemperate in his studies, in his writing or reading, or even talking, to say nothing of his passions; or intemperate in the use of medicine, which can kill as well as cure, or even in the use of what taken judiciously tends to invigorate the system and cheer the mind, such as the bath, or exercise. As to the latter, many a man has killed himself by trying to ride or walk off some little illness which it needed but rest alone to cure. The well-to-do or wealthy in the world are the most likely to be intemperate in the pursuit of pleasure; those who have to struggle for the existence of themselves and their families, to be intemperate in their hours of labour. And intemperance in this respect assuredly means a waste of health—the only property that a poor man possesses. Many people, indeed—to use a homely saying—kill themselves in order to make a living. Long hours of labour are detrimental to the health, even when the work is carried on by daylight, but ten times more hurtful and deadly is night-work. There are those who must carry on their work at night, and those who need not do so; in this paper I address myself to both; the evils that accrue from the habit are the same in either case, and if knowledge is power, it will do both classes good to have them pointed out to them.

First and foremost, then, long hours of night-work are injurious to the health from the loss of wholesome sleep which they entail. Sleep, we all know, is food to the nerves; in other words, it is only during sleep that the nerves can rest and readjust the balance of their functions, disturbed by the wear-and-tear of waking hours. If this balance be lost—and lost it is in the long run even by the strongest who sin against nature's law as regards sleep—a very distressing condition of the whole system is the inevitable result, a condition which may be cured by complete rest and relaxation, and a return to more regular and consistent habits of life, but which ends only too often in premature old age and early death. Professional men, literary men, artists and students, are very frequently the victims of nervous exhaustion, produced through the evil habit of turning night into day. For I maintain that good and health-giving sleep can only be obtained during the silent hours of the night. It may be averred, however, that the very best brain-work can also be performed at night. I doubt it, for the body of a healthy man is always more fresh in the morning, and his mind more light and cheerful, he is then in the best state to do good work without extra wear-and-tear of brain and nervous tissue.

There is no disease so insidious, nor when fully developed so difficult to cure, as that species of nervous degeneration or exhaustion produced by night-work and long hours. It is easy to understand how such a state of prostration may be induced. The brain and the nervous system have been very aptly compared to a galvanic battery, in constant use to provide a supply of electric fluid for consumption within a given time. "As long," says a recent writer, "as supply and demand are fairly balanced, the functions which owe their regular and correct working to the fluid are carried on with precision; but when, by fitful and excessive demands carried far beyond the means of supply, the balance is not only lost, but the machine itself is overstrained and injured, disorder at first and disease afterwards are the result. This illustrates pretty clearly the condition of a well-balanced brain and nervous system, supplying without an effort all the nervous force required in the operations of the mind and body, so long as its work is in proportion to its powers; but if embarrassed by excessive demands, feebly and fitfully endeavouring to carry on those mental and physical operations over which it formerly presided without an effort."

The symptoms of nervous prostration are exceedingly painful; we can afford to pity even the man of pleasure, who has by his own foolish conduct induced them, but much more so the brain-worker, who has been burning the midnight oil in the honest endeavour to support himself, and probably a wife and family, with respectability in life. He has made a mistake for which we can readily forgive him. In the pleasurable excitement of honest toil, he has forgotten that the supply of work cannot be regulated by the demand or need for it, but by the power to produce it. He has been living on his capital as well as the interest thereof, and when he finds the former failing, when he finds he has no longer the strength to work as he used to do, and starvation itself probably staring him in the face if he ceases to toil, why, the very thought of coming collapse tends only to hasten the catastrophe, and reason itself may totter and fall before the continued mental strain.

To give the symptoms in detail of nervous prostration produced by long hours of laborious brain-

work, would be a task space would not permit me to complete. Probably the first sign of failing nervous energy is given by some of the large organs of the body; it may be functional derangement of the heart, with fluttering or palpitation, or intermittent pulse, and shortness of breath in ascending stairs or walking quickly. The stomach may give timely warning, and a distaste for food, or loss of appetite, with acidity, flatulence, and irregularity of the bowels, may point to loss of vitality from waste unrepaired. Or brain symptoms may point out to the patient that things are going wrong. He may not find himself able to work with his usual life and activity; he may have fits of drowsiness, or transient attacks of giddiness, or pain, or heaviness, or loss of sleep itself. This latter would be a very serious symptom indeed, for in sleep not only are the muscular and nervous tissues restored and strengthened, but there is for the time being a cessation of waste itself; and if sleep be essential to the ordinary healthy man, it is much more so to him whose mental faculties have been over-tasked. Long hours and night-work lead to loss of sleep, and loss of sleep may lead to insanity and death.

Loss of memory, whether transient or general, is a sure sign that the brain has lost its power of healthy action, and needs rest and nutrition to restore it. Irritability of temper, and fits of melancholy, both point in the same direction, to an exhausted nervous system. Now I may safely say that there are very many thousands of brain-workers in these islands who are suffering, sadly and it may be silently suffering, from the effects of excessive toil and over mental strain. To warn such that they are positively shortening their lives, and that they cannot have even the faintest hopes of reaching anything like old age, is only to perform part of my duty as medical adviser. I should try to point out some remedy for the evil. To bid them cease to work would, in a great many cases, be equivalent to telling them to cease to live. They must work, or they cannot eat. Well, but there is one thing that all can do, they can review, remodel, and regulate their mode and system of living.

I will give the reader a short history of two cases which occurred in my experience within the last two years. I could give many such, but these, I think, will serve every necessary purpose. The symptoms in both were induced by night-work and long hours of labour. The first patient I shall call A. B., aged thirty-nine, a journalist by profession, but living in the suburbs, so that he suffered from no lack of fresh air.

"Hallo!" I said to him one morning, as I met him hurrying along L—— Lane, as if walking for a wager. "You're out early for *you;* why, it isn't much past eight o'clock."

He looked haggard, harassed, and badly-done-by, as one might say, and somewhat peevish withal; and in stating his case to me, which he did with some reluctance, I could see he was trying to put the best side of it foremost.

"I'm doing a constitutional, doctor," he said, with an attempt at a smile; "my work has been worrying me of late, and I can't sleep so well at night. I think walking takes the blood away from the head, and stirs the liver up. Doesn't it?"

"I don't think there is much the matter with your liver," I replied; "you don't smoke or drink."

"I do more than I ought to of each," he said. "I take a little spirits to force me to work when I feel fagged, and I smoke to soothe my brain."

By gentle pressure I wormed all A. B.'s symptoms out of him; and, the ice once broken, it seemed a relief to him to talk about his case. His whole life was a burden and a worry to him; he had no pleasure in the work that used to be but a pastime; he was dyspeptic and irritable, and gloomy and depressed. He knew rest would do him good, but he couldn't afford it. He stared incredulously when I told him he could not go on at this rate, that two years more of a miserable life would be about all he could expect.

"Do you think," he asked, "my case is so very serious?"

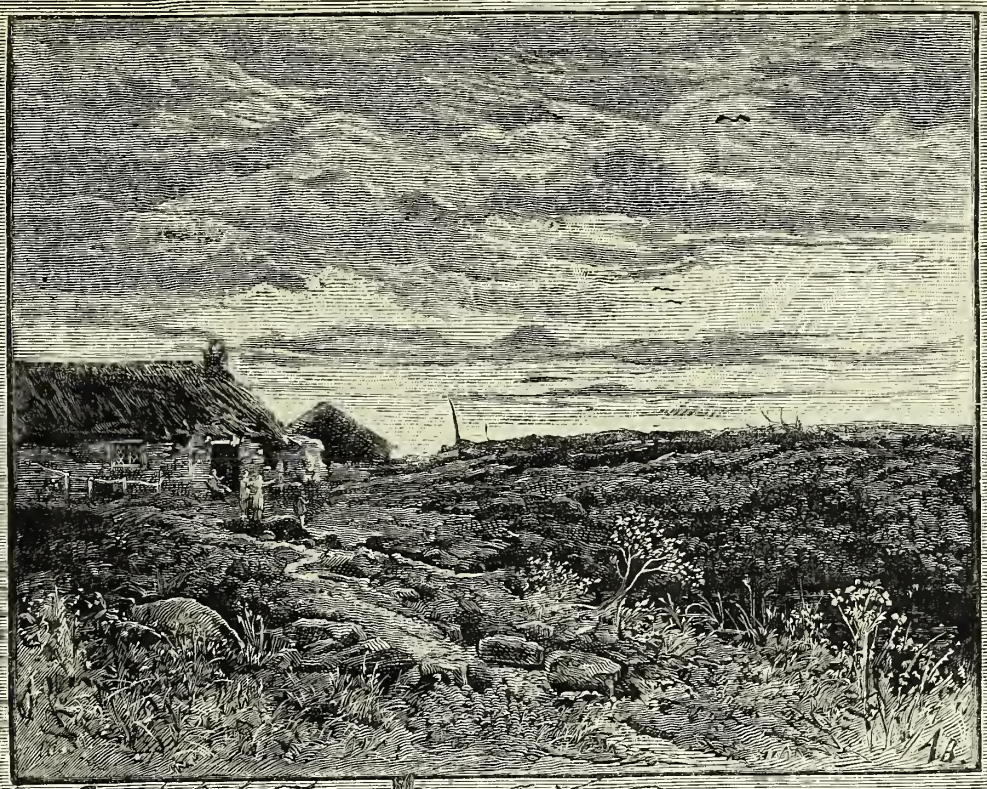
"I know it," I replied.

"I would do anything to get well," he said, "and to *feel* as I used to."

I got A. B. to take a fortnight's partial rest—a holiday was out of the question—at a bracing sea-side watering-place. I got him to abjure night-work, to eat regularly, but *sparingly*, of nutritious easily-digested food, to take *moderate* exercise, and a tepid bath twice a week, and to be as much as possible in the fresh air; to give up stimulants, using the extract of malt instead, and to smoke as little as possible. Giving up the night-work was the hardest part of the treatment. But he is well now, and works by day. He makes more money, and makes it more easily now than when slaving by night. But he has learned the true value of time, and how to economise it.

The case of C. D. is similar, but had a sad ending. He was forty-five years of age, a story-writer and reviewer; did his lighter work in the afternoons, reserving his heavy till after ten p.m., when he toiled till two or three in the morning. Drank only claret, but *far* too much of that. Was not a breakfast-eater; how could he be? Was never "in form" for any kind of work till two or three p.m. Could not convince himself that his system of work and living was injurious till a plague-spot appeared in his ankle. Oh! only a little swelling without discolouration, a swelling that *pitted* on *pressure*. It told a tale, though; and nine months after, C. D. was dead—dilatation and subsequent rupture of the heart.

But night-work and long hours affect not only the brain-workers, but a far larger class, and one that, alas! cannot help itself; I allude to needlewomen, &c. &c., a class that I pity if I cannot help. It is sad to think that thousands upon thousands are annually hurried to their graves, through consumption and other incurable diseases, engendered by their being compelled to work through long hours of the night in badly-drained and worse-ventilated apartments, often underground, often exposed to wet and draughts, and nearly always having to breathe air polluted with smells that would tend to breed fever even in the most healthy and well-fed.



AFTER SUNSET.

AFTER sunset in the west,
Robes that clad the monarch Day,
Golden crown and crimson vest,
All are spurned and cast away.
Far along the purple sea
Fading splendours slowly die ;
Many a bird to many a tree
Rustling flies, for night is nigh.

After sunset, gone the glow,
All the air with silence fills ;
After sunset, colder blow
Wailing winds from lonely hills.
Ceased is labour, hushed is mirth,
Day has died on couch of gold ;
Twilight veils the weary earth,
Quiet broods o'er flock and fold.

After sunset, o'er the moor
Slowly flies the plover home ;
To the leafy cottage door,
Sleepy-eyed, the children come ;
Watching how the great white moon
Rises high o'er hill and plain ;
Silvery stars will sparkle soon,
Peeping out and in again.

After sunset, melodies
All unheard in noisy day,
Like a fragrant southern breeze
Through the pensive spirit stray.
Mem'ries, lost, ah me ! so long,
Floating round me dreamily,
Like a dim-remembered song,
Melt into a thought of thee !

THE SCIENCE OF BREAD-MAKING.

BY A GOVERNMENT ANALYST.

NOT many years ago, any one curious about the why and the wherefore of things might have asked the question, "Why do we bake our bread as we do?" without receiving any more satisfactory reply than the general statement that baked bread was preferable to raw grain, and experience had shown the present system to be an improvement on older methods. For many a century, experience has been man's only guide in his varied every-day concerns, but while on the whole reliable, it may be compared to a blind man dwelling in a wood, who only after many a knock and stumble has at last become well acquainted with his neighbourhood. On the other hand, science, our young guide, may be regarded as the blind man's son, the heir of experience, and himself endowed with the faculty of keenest vision; so that, although in his youthful zeal and vigour he may occasionally trip on some old root, he can not only avoid the difficulties of the way, but take advantage of more promising paths, and go boldly forth on wider explorations. So it is that while many of our industries, bread-making among others, have for long been carried on successfully in a blind mechanical sort of way, only recently have we really understood the *rationale* of the various operations. In the hope, then, that a knowledge of these scientific principles may prove generally interesting and perhaps practically useful, we shall endeavour, as simply and as briefly as possible, to enable our readers to obtain an intelligent understanding of the science involved in the manufacture of "our daily bread."

If we analyse a sample of wheaten flour we find, neglecting minor ingredients, that it contains approximately—Starch, 60 per cent.; albuminoids, 11 per cent.; gum and sugar, 4 per cent.; salts, 2 per cent.; and a little fat or oil.

Then remembering that a perfect food is one which contains—(1) Starch or sugar and fat for generating heat and force; (2) Nitrogenous matter, such as albuminoids, for producing flesh; and (3) Phosphates, lime and other salts, for building up the bones—we see that wheat, although somewhat deficient in fat, the great force-producer, is really a perfect and all-sufficient food, and we can thus understand how it has come to be so largely used as to be termed "the staff of life." Oats and barley, however, have a very similar composition, and indeed are in some respects superior to wheat, so that it seems rather strange why wheaten flour should be almost exclusively employed for bread-making, but the reason for this will become apparent further on.

The primitive tillers of the ground prepared the farinaceous portion of their food by simply grinding corn, mixing it with water, and heating the rude cakes thus obtained. But in course of time, and perchance by accident, they found that if these cakes were left unfired they soon began to decompose, and if mixed up with fresh meal yielded bread superior to the tough, sodden mass prepared with water only. In course of time, too, they discovered that a still better loaf could be obtained if they separated the rougher portion of their meal from the fine white powdery part; and they likewise found that wheat was almost the only grain whose flour was susceptible of any marked improvement by the addition of this decomposing paste called leaven; but as leaven acts very slowly, soon after good yeast became obtainable the latter article came into use for bread-making.

There is a good reason to account for the exclusive use of wheaten flour, in the fact that it alone can be made into a light, spongy bread; but to understand why the flour of other cereals does not possess the same property, we must refer to the above analysis, the second item of which is the albuminoids. These are nitrogenous substances, and they are named albuminoids because in several respects they resemble the albumen or white of egg. In the case of wheat the greater portion of these consists of gluten, the sticky elastic matter which renders flour coherent when mixed or kneaded with water; but, at the same time, there is always present a variable amount of other albuminoids, which, unlike gluten, are readily soluble in water. Now the reverse is the case with barley, oats, rye, &c., for although these cereals contain a larger total of albuminoids, very little of this is gluten, the greater part consisting of soluble bodies. The importance of this fact will become evident as we proceed.

Another question now suggests itself: "Why should the use of yeast or leaven produce a better bread?" and it is necessary, before proceeding to the practical part of our subject, that we should thoroughly understand the reason of this.

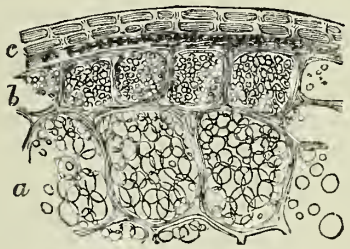
Starch is the main ingredient of all cereals, and, as already mentioned, its office in the animal economy is to keep up the temperature of the body. It does so by being burnt in the blood, just like coal in the furnace, the carbon which it contains combining with the oxygen which we breathe, and developing heat by its combustion. But starch, as starch, is useless to the body; the carbon must be rendered soluble before it can be absorbed into the blood, and provision is made for this necessity by the presence in the saliva of a very powerful substance, called ptyalin, which possesses the property of changing starch into sugar, and thereby adapting it for absorption into the blood. But with raw starch this change is very slow, and probably the painful experience by primitive man of indigestion caused by feeding on raw corn led to the adoption of baking or boiling his food.

A starch granule is a little round sack filled with

granulose matter, which bursts on being heated and thus allows the contents to escape. In this ruptured condition starch is readily acted on by the ptyalin, especially when introduced into the mouth about the ordinary temperature of the body (98 Fahr.), and we can thus perceive the advantage of having our starch food burst before we eat it. But we need scarcely say that the ptyalin can only change that portion of the starchy food with which it actually comes in contact, so that if any part escapes being moistened by the saliva there is a possibility of its remaining undigested, for starch undergoes comparatively little change in the stomach. Now unleavened bread, prepared simply with salt and water, forms a close, heavy, sodden mass, difficult to masticate and mix with the saliva, and still more so when dried in the form of biscuits. On the other hand, bread prepared with leaven or yeast is light and spongy, and thus easily penetrated and thoroughly moistened by the saliva.

But we must now proceed to the details of bread-making as usually conducted at the present day.

A grain of wheat if sliced through the centre is seen to consist of several distinct parts. The centre is filled with a white powdery mass, *a*, outside which is a layer very rich in albuminoids, *b*, and beyond this are the thin outside layers, *c*, which contain great part of the phosphates and other mineral salts, the outermost coat of all being the least valuable, containing a good deal of silica or sand. There are several methods of reducing the grain to a powder, either by means of rapidly revolving knives, or by grinding, usually between stones; while by re-grinding, siftings, and various other operations, the desired quality of flour or meal is obtained. The grain may be "decorticated," that is, the outer coat may be removed, while all the really valuable part is left; or the whole grain may be finely ground, so as to obviate, or at least minimise, the irritating action of the bran upon the intestinal coat. If a whiter flour be desired, which shall not be deficient in the phosphates so necessary for children and young people, all the outer coats may be removed and these salts artificially restored to the flour, as lately advocated.



SECTION OF A GRAIN OF WHEAT.

The first thing which the baker has to see to is the preparation of his "ferment." For every sack of flour (280 lbs.) some eight or ten pounds of dry mealy potatoes are taken and well boiled to burst the starch cells, then mixed with water and about a quart of fresh brewer's yeast, and a pound or two of flour added, the whole being kept at a temperature of about 80° or 90°. The flour contains some soluble albuminoids which act like ptyalin upon the starch of the flour and potatoes, which thus becomes changed into sugar; the yeast then attacks the sugar, breaking it up into alcohol and carbonic acid gas. The gas becomes entangled in the gluten, and thus causes the whole mass to swell up. After some five hours the head falls in through the escape of the gas, after which the ferment is allowed to rest about two or three hours longer. The object in using potatoes is to obtain sufficient sugar for producing the gas required in the quickest way possible.

The next part of the process is the preparation of the "sponge." About one-fourth of the flour is placed in a trough, the ferment is then added, and the whole mixed up with water. In this condition it is allowed to remain and ferment for another five hours, when, if it has been kept at a proper temperature and the yeast has been good, it will have risen and formed a head, which is allowed to break. It begins to rise again, however, and a second break will soon occur; this is the sign to add the remaining three-fourths of the flour. The whole mass is thoroughly mixed up with the necessary amount of water, and a sufficient quantity of salt, the mixing being effected either by hand or machine.

The "dough," as it is now termed, is left about an hour to rise, and it is of the greatest importance that the mixing shall have been efficiently performed, so that in this stage the whole mass of the bread may be uniformly permeated by gas bubbles, to avoid those unsightly and indigestible lumps observable in badly-made bread.

As already mentioned, the rising of bread is due to the bubbles of carbonic acid gas becoming entangled by the viscid, tenacious gluten, and herein is the difference between ordinary bread and that prepared from rye, barley, oats, or other cereals, which contain only a small amount of gluten and are thus unable to entangle or retain sufficient gas for a thorough aëration.

The next operation is to weigh out the dough into pieces of the requisite weight. These are then placed in pans or on trays and put in an oven at a temperature of 400° to 500° F. and kept there about an hour and a half. The heat of the oven momentarily assists the fermentation, and at the same time increases the volume of the gas, thus greatly distending the minute vesicles with which the dough is penetrated. In a few minutes, however, the temperature has become sufficient to kill all the yeast germs, and the starch cells are ruptured by the heat of the water inside the loaf, for although the temperature of the oven be over 400° the interior of a loaf is never much more than 212°—that of boiling water. Thus, although baking may appear a mode of cooking by dry heat, it is not so in reality, the starch being in fact boiled in the steam of the water which the bread contains. In the oven the outside of the loaf becomes more or less browned and glazed, a result due to the heat and moisture having changed some of the starch into a sugar called dextrin, which is readily darkened by heat. A little dextrin is usually formed inside the loaf too, but with good flour the amount should be small, and the consequent darkening very slight. With inferior flours, however, the colouring may be considerable, and it were well if every miller and

baker were acquainted with the reason thereof, as they might then obtain better prices, and the public at the same time get a better flour. In wet seasons or when wheat is badly stored and kept at all damp, the soluble albuminoids which it contains act upon the insoluble gluten, decomposing it into soluble bodies, and at the same time produce dextrin by their action on the starch of the grain. The flour prepared from such grain is consequently deficient in gluten and rich in dextrin, the result being that when made into bread it rises badly and gets highly coloured. An effectual remedy against this is to be found in kiln-drying the grain, which has the same effect as boiling an egg, namely, preventing the decomposition of these albuminoids, while even by drying the flour their degrading or decomposing action may be greatly diminished. During the fermentation of the bread this action is checked by the salt used, which has been aptly compared to reins, while yeast serves as spurs, for the control of the baker's operations. But the salt serves other ends, for it gives the bread a better taste, and at the same time forms part of the supplies required for the work of digestion.

Hitherto we have confined our attention to bread raised by means of yeast, but there are several other methods of effecting the desired aëration, and these we must now explain.

Let us describe the most important method. Carbonic acid is produced by acting on chalk or soda with an acid, and the gas after being thoroughly purified is passed into water, which soon becomes highly aërated. The water thus charged with gas is used for mixing with the flour, no fermentation being necessary, and much time being thus saved. The loaves are immediately put in the oven, the heat of which distends the gas bubbles, and if the mixing has been uniform and complete, a well-aërated loaf is obtained, and as there has been no time for the decomposing action of any of the albuminoids in the flour, no dextrin has been formed inside, and the result is likewise a very white loaf.

Aëration by such methods as the above is found to produce a lighter and more agreeable brown or whole-meal loaf than can be obtained by using yeast. But a still better plan for preparing good brown bread is that proposed by Professor Graham, in his admirable lectures on bread-making delivered at the Society of Arts in December, 1879, to which we are indebted for several items of our information. He suggests making a sponge of the finest flour by the ordinary fermentation system, and then working up the whole meal with it. A light well-raised loaf is thus obtained, and no time is allowed for coloured products being formed, since the dough process lasts but an hour.

Our subject is a wide and interesting one, but we must now conclude. We trust, however, that even from these brief remarks our readers may have obtained a clearer conception of those principles which should guide us in the manufacture of our bread, and we also hope that we have in some measure rendered it apparent that only by a thorough understanding of the science of things can we ever fully utilise the vast resources of our marvellous planet.

MAJOR GODFROY'S DISCOVERY.

By FRANK BARRETT, Author of "Hidden Gold," &c. &c.

CHAPTER THE FIRST.

MAJOR GODFROY'S FIRST LOSS.



MAJOR WILLIAM GODFROY was a gentleman. The English language can give no greater compliment to his memory than that. It includes all that is true and good and admirable, that title of gentleman, which a peasant may win and a prince may lack.

At the close of the Crimean campaign, he returned to England with a heavy heart, for he left behind him, lying there in the crowded grave-yard of Scutari, his oldest and dearest friend, Colonel Drummond. They had been companions in boyhood; they entered the service together, and for a time shared the same mess. For five-and-twenty years they had lived in a companionship closer than that of ordinary brothers. The major had no other friend, for he was a reserved unimpulsive man, who disliked what is called "society," and preferred devoting his affection to one man to dividing it among many. And now the one friend was gone and the other remained.

"The Lord's will be done," he murmured, bowing his head as the earth closed over the body of his comrade; and he strove to control the quivering muscles of his lips, and accept the decree of Providence with Christian resignation. At that moment he had greater need of fortitude than when for the first time he faced the Russian guns.

A few months before the declaration of war, Colonel Drummond had married a young wife. In the winter a letter was brought to him in his snow-covered hut, which told that his wife had given birth to a daughter. Many a night the two friends sitting together talked

of the child—his little Doris—whom he had never seen, and Major Godfroy knew that if the brave soldier prayed to be spared from death it was for his child's sake and her mother's.

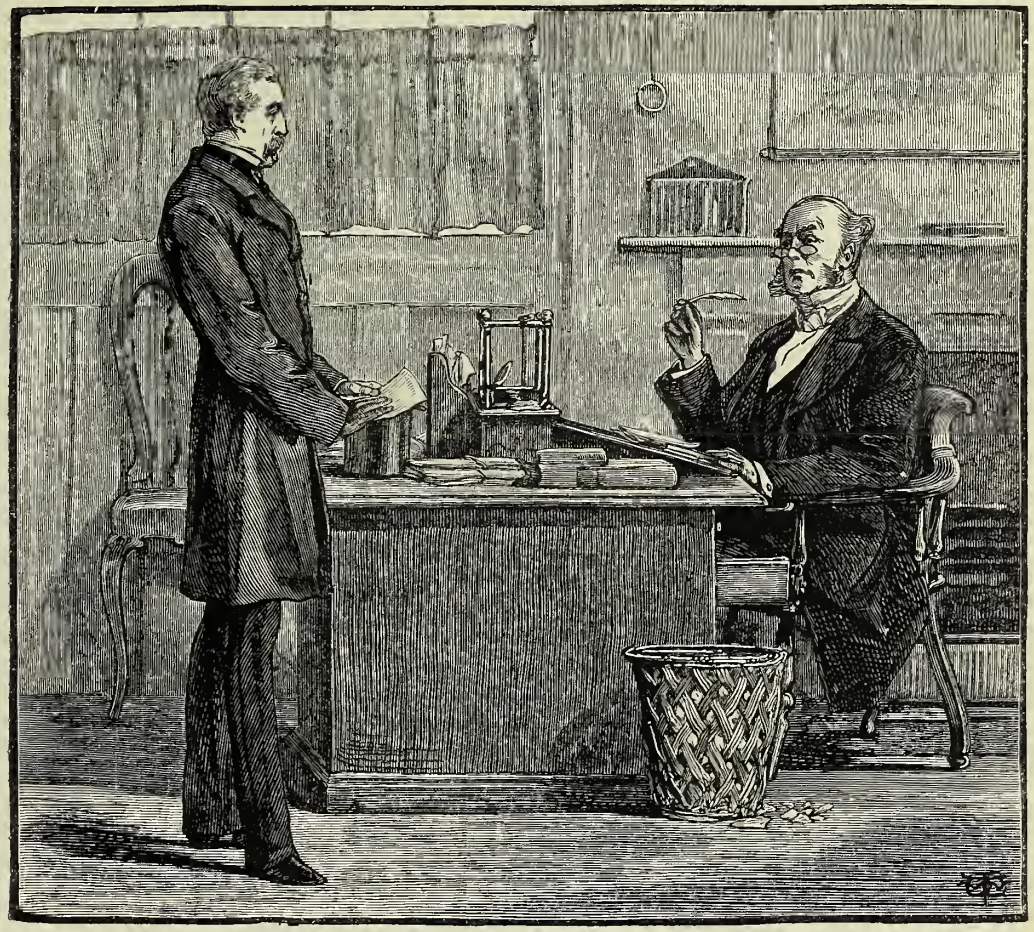
A solemn duty now devolved upon the major. He had to protect the widow and orphan of his friend. He had to supply, as far as a friend might, the loving care of which they had been deprived. It was a difficult and a delicate, and withal a sad task to undertake. He dreaded meeting the young widow, for it seemed to him that a man must suffer less than a woman, and he felt powerless to offer consolation while his own heart was inconsolable.

Mrs. Drummond was staying with her child under the care of her mother and father at Chislehurst, where the Pitburn family resided, and thither the major hastened from Southampton. It pleased him to find the mother smiling over her baby. She wore crape instead of coloured silk, and her face was perhaps paler than when he saw it before; but otherwise the major saw little alteration in her appearance. Indeed her face was far less piteous than when she waved the last farewell to her husband.

"You see, my dear major," Mr. Pitburn explained, when Major Godfroy after dinner expressed his satisfaction in finding that Mrs. Drummond had so speedily recovered from her loss—"you see that from the very first we hourly expected this distressing event, and we did not attempt to undeceive Maud as to the probability. I am a practical man, major, and I hold that it is best to look at the possibilities of life from a pessimist point of view. It avoids so much disappointment in the long run.'

"She has a child to love, and fill the vacant place in her heart," said the major; "Providence that took away has given to her."

"Of course she felt her loss less, having a child to occupy her attention. There is a great deal to be said for the maternal affection," said Mr. Pitburn, with the patronising air of a post-prandial philosopher. "But I maintain that the chief cause of her bearing up so well was that natural disposition to anticipate the worst which she possibly inherits from me, and which I have always endeavoured to encourage in the minds of my family. The unhappiness that has been inflicted on mankind by that demoralising habit of looking upon the sunny side of things is incalculable."



"'I HAVE COME TO LEARN MORE ABOUT THIS,' SAID THE MAJOR" (*p.* 421).

The major did not reply; he was looking back, perhaps, on the sunny side of *his* life.

He was the last man in the world to begrudge happiness to others, merely because he himself was wretched, nevertheless it pleased him to find that Mrs. Drummond was not so indifferent to her loss as the heritage of her father's philosophical temperament should have rendered her. When she was alone with the major, she asked him to tell her how her husband fell; and when he told the simple story in a few unaffected words, that got their sentiment merely from the speaker's voice and trembling lip, she buried her face in her hands, and wept with the fulness of her emotional nature. She was not a heartless woman; rather the reverse. A song, a tale would move her to tears, but the same song or tale would make her forget them. People like her suffer deeply, but not long; their lives are chequered like an April day; no mood is constant or reliable.

After a few days at Chislehurst, the major went to London in accordance with the desire of Mr. Garton, of Lincoln's Inn. Mr. Garton had been an intimate personal friend of the late Colonel Drummond, and had drawn up his will. He was a shrewd, clear-headed man of about fifty, with a soft voice and a frank open countenance. There was nothing typical of the ordinary lawyer in his appearance except his firm mouth and the scrupulous neatness of his dress. For ten minutes the two gentlemen talked of their lost friend with emotion on both sides, and then Mr. Garton with a sigh rose from his chair, took from a shelf the tin box bearing Colonel Drummond's name, and proceeded to business.

"I will, if you please, read Colonel Drummond's will to you; it is already known to your companion legatee, Mr. Barton. His duties are merely nominal, and terminate with the proving of the will."

"Is not Mr. Pitburn legatee also?" inquired the major.

"His name is not mentioned in the will," answered Mr. Garton.

The major wondered if the pessimist principles of that gentleman would be proof against this neglect; for Mr. Pitburn had not failed to enlarge upon the colonel's generosity, while expressing his opinion that he should receive but a small legacy as a token of respect—the colonel's library, or a couple of thousand, or something like that.

Mr. Garton read the will through without comment. It was not more intelligible to the major than such documents are to the generality of inexperienced hearers.

"I understand nothing of legal matters," said Major Godfroy, when Mr. Garton came to the end; "will you be good enough to explain what you have read, that I may fully comprehend my duty?"

"Certainly. By this will, you are nominated the sole trustee of the late Colonel Drummond's property. That is to say, of all excepting the two hundred pounds per annum settled upon Mrs. Drummond for life at her marriage with the colonel. At her death that annuity reverts to you or your legatees."

"But surely the bulk of the property, these twenty or thirty thousand pounds that you speak of, are at the disposal of Mrs. Drummond."

"No. You are charged to invest the capital as you think fit. The interest, which roughly will amount to eight or nine hundred a year, is at your disposal. You are at liberty to add it to the capital for the benefit of the daughter when she comes of age; or you may, if you choose, give the whole of the interest as it accrues from the investment to Mrs. Drummond for the support of herself and her child. You have heard the clause that limits you to that. The whole of the principal is reserved for his child—if a boy, to be his at the age of twenty-one; if a girl, at the age of eighteen. Until that time the capital is to remain in trust with you or with your legatees."

"Is that not an extraordinary provision?" asked the simple major; "surely no one could be a better guardian of his child's fortune than her mother."

"Possibly the colonel thought otherwise. Doubtless he had his reasons for making such a disposition," the lawyer said drily.

The major carried this news to Chislehurst.

"It is a monstrous, an iniquitous instrument," said Mr. Pitburn, when the family circle were free to discuss the affair in the major's absence. "I consider it an insult to my family, individually and collectively. Goodness knows I am not prone to over-rate my own worth, or to expect more than is reasonable; but that my child should be left in the position of a beggar, dependent on the caprice of this idiotic major for the very requisites of life, and that I should reap nothing by the death of a man whom I am sure we always treated with the greatest civility—not even a petty thousand—absolutely nothing—is beyond understanding. My poor Maud!"

"I have two hundred a year, papa," said Maud in a quiet matter-of-fact voice, "and the major assures me that I need not limit my expenses to less than a thousand a year. One can live very comfortably upon that."

"I see through it all," exclaimed Mr. Pitburn, suddenly inspired. "The arrangement was suggested by jealousy. The colonel knew that with a fortune of thirty thousand pounds, his widow would marry again, and he so disposed his money to preclude it. What intense meanness, what——"

"Oh, papa!" Maud cried, her cheeks flushing, and tears coming in her eyes, "George was never mean!"

"I'm sorry to hurt your feelings, my love, but there's the fact."

Despite the fact being there, Mr. Pitburn evolved another theory of an entirely contradictory character within a quarter of an hour. People who jump at conclusions are never satisfied with one. The last solution of the question was that the money had been left with Major Godfroy, that he himself should marry his friend's widow, and this was the more reasonable idea, and one which perhaps had not escaped the colonel in looking into the future. It was the most delicate way in which he could intimate his wish, that

those whom he loved and left should live together and share his fortune.

It was a long time before the major suspected the intention of the will, for he had not the cleverness of Mr. Pitburn. It was not indeed until he himself had formed the idea of marrying the widow, and was questioning his conscience as to the feeling with which his old friend might have contemplated such an event. Then, not willing to be guided by his own interpretation alone, he consulted Mr. Garton on the subject.

"There can be no doubt that this was your friend's wish," said the lawyer, with a smile, "and now that your own desires in this matter give me liberty to speak, I may tell you that the colonel's will was drawn up expressly with that view."

"How much unnecessary trouble might be avoided if we could only say straight out what our hearts honestly feel!" said the major to himself, as he left the Inn.

There were several reasons for the major desiring to marry Mrs. Drummond. He loved her, not with the impetuous passion of a young man—for he was over forty, and had never been impetuous in his younger days—but with the tender earnestness of a thoughtful sweet-tempered man. His love had all the generous devotion of a father's affection, with the additional warmth and gallantry of a perceptive man for a pretty woman. Mrs. Drummond was still quite young and very pretty; the mourning she wore set off her pink and white complexion and sunny hair. It was for that reason, perhaps, that she wore the heavy crape beyond the customary period. In addition to prettiness of face and figure, she had softly feminine charms of manner and habit, that were particularly pleasing to the major. It was fascinating to see her with her baby, talking nonsense to it, teaching it to walk, to lisp the first sweet baby-word "mamma," making indescribable little sounds of endearment which by themselves would be ridiculous enough, but which, coming from her lips, and with the accompaniment of winning gestures and sweet smiles, were touchingly beautiful. She was not clever, she was not even wise, scarcely what one calls "sensible," but her weaknesses, her pretty folly, her ever-ready tear and smile, were all to the major the outcome of innocence and trustful simplicity, and so were a thousand times more precious in his estimation than the collective wit and wisdom of Girton College. He dreaded clever women as he disliked effeminate men.

That he might more efficiently guard her and her child was another motive for wishing to marry her. Mrs. Drummond had removed from her father's house to a villa in the neighbourhood. Looking at the shadowy side of the future, Mr. Pitburn foresaw that the major would give Maud just as much as was necessary, and no more; and as he did not desire to lessen her requirements by any generosity on his own part, he himself counselled her to take the villa, promising to dine with her once or twice a week. He advised her earnestly to support her constitution by drinking that particular kind of beverage which he himself found so agreeable and beneficial, and gave the address of the merchant who supplied him.

The father kept his word, dining with his Maud twice and sometimes thrice a week—doing full justice to the wine. Nevertheless the major felt that it must be very lonely for the widow when visitors were few and baby slept—indeed Mrs. Drummond admitted that sometimes she sat down and "had a good cry," thereby melting the soldier's heart with sympathetic pity—and considered it wrong that she should live with her child in a house under no better protection than was afforded by her three or four young women-servants. His military duties prevented him from living near her, and he did not clearly see his way to selling out of the army at that time. He was one of the poorest majors in the service. If he were to marry Mrs. Drummond, however, he could afford to make some pecuniary sacrifice, and might resign his commission at once.

Mrs. Drummond was not greatly surprised when one afternoon the major made her a formal offer of marriage. She might have seen, with quick womanly perception, the reason for the major's guarded behaviour of late, and anticipated the result of his increasing anxiety for her. She blushed; she bowed her head as she listened to him; she wept a little when he spoke of continuing the faithful love of his dear friend, and then she smiled as he took her hand and drew her to his heart.

Mr. Pitburn's melancholy forebodings were satisfactorily realised when he heard that his Maud had consented to become Major Godfroy's wife.

"I told you so," he said, smiling. "What did I say? Of course this precious major, with his prim stiff-necked pride, is not above sharing your fortune. A thousand a year is not a bad fortune for a man who, I'll be bound, hasn't a penny besides his pay. You might have done much better, my dear child, much better. There are younger and more eligible men than Major Godfroy."

But Mrs. Drummond was content with the prospect. The major was a dear old gentleman, as kind and obliging as any man could be. And with him in the house she should never be afraid of burglars, or have any difficulty in sending for a doctor if dear baby was ill in the night. And then in the winter he would take her to the concerts, and she could make her entertainments of a rather livelier character than they had been. All her guests needn't be married or aged. As to her papa's suggestion that she might have done better, and married a man younger than the major, she knew no one she liked better than him, and so that did not vex her spirit greatly. Still, the idle words were not unfruitful.

CHAPTER THE SECOND.

THE MAJOR'S SECOND LOSS.

"YOU have had a visitor, Maud dear," the major said to Mrs. Drummond one day, when he had saluted and taken a seat.

"A visitor?" exclaimed Mrs. Drummond, without

raising her head—she was trifling with a charm upon her watch-chain—"A visitor? When?"

"This afternoon—just now. The gentleman I met at the garden-gate."

"A gentleman? You must have been mistaken," Mrs. Drummond said, raising her head with an effort, and quickly averting her eyes from the major's face.

"I could not have been mistaken in the fact that I met a gentleman leaving the garden as I entered it; but I may be in error about his being your visitor. Probably some one mistook the house, or called upon business which your servant has not thought worth while troubling you with."

"Very likely. How odd I should not have heard his knock!" said Mrs. Drummond, with a forced laugh that was quite unlike her naturally musical expression. And then she turned the subject quickly, pressing the major to take some refreshment.

Men who never deceive seldom suspect. The major interested himself about little Doris and forgot the incident; but he thought that Mrs. Drummond was unusually silent and *distraite*, and hoped she was not unwell.

Mrs. Drummond was silent and *distraite*. Her embarrassment grew, and at length becoming intolerable, she left the room with an excuse, and locked herself in her bed-room for half an hour. When she came down there were signs of tears upon her eyelids, despite the cold water in which she had so carefully bathed them.

"Something troubles you, Maud dear; tell me what it is," said the major, tenderly drawing her towards him. The impulsive girl burst into tears under the influence of this misplaced kindness.

"I told you an untruth," she sobbed, "I have had a visitor, and that was he whom you met."

"Well, dear?" said the major, in a tone of tender encouragement.

"And it was very wrong, and I don't deserve your kindness."

"I do not know why you should wish to deceive me; there is nothing wrong in your receiving visitors. Why did you try to conceal the fact?"

"I—I—I feared you would be jealous. It is not as if he were a clergyman or a doctor."

The major laughed.

"Jealous, Maud! Have you not said you loved me, and are we not to be married in August?" Then he became grave. "You have been properly introduced to this visitor?"

"He is papa's friend. He has never before come here except with papa."

"You never told me that he came, although you have gone into the particulars of your papa's visits."

"I have been afraid of—of hurting your feelings, and papa said I had better not mention it."

"You have credited me with greater stupidity or less kindness than I think I deserve, Maud."

"No one in the world is kinder than you—you are only too good."

"And you still love me?"

"Yes, yes, yes," she answered strenuously, as if at all costs she would do her duty, and repay the affection bestowed upon her.

"I have only one thing to say, and then we will dismiss this subject, dearest. I want you to tell me the truth and be guided only by your own sense of right and wrong. Even one's father may sometimes be unwise."

Mrs. Drummond was glad to escape from the subject. Like all weak people she feared to give pain. Her confession was only partial; it had been made under a sudden impulse, which she regretted the moment it had passed. "How stupid and silly I am!" she said to herself. "I have given unnecessary pain. The dear old fellow had forgotten all about seeing Mr. Standish; why could I not let well alone?"

Mr. Standish called again, and as the major's next visit was some days later the foolish widow said nothing about it, and flattered herself she had done well by being silent. She satisfied her conscience by remembering that she had told Mr. Standish not to call upon her again. Yet in her heart she knew he would repeat his visit, and she would have felt disappointed if he had not.

And why should she not receive his visits? The major himself had said there was no harm in her receiving visitors. And she loved him none the less because she liked this handsome Mr. Standish as well. She felt the same affection for the dear old major she had ever felt. She quite fully appreciated his kindness, his generosity, his sweet tenderness for her and baby. She could never love him less. But her love for him was less than her liking for Mr. Standish. She loved and feared the major as a child loves and fears its father, not at all as a woman should love the man she has promised to marry. Those very qualities that made her admire Major Godfroy, made a breach between them by showing her how much she was his inferior. But if she felt her own shortcomings, she recognised at the same time that she was doing all in her power to make up for them by marrying the major. And so she came to look at her approaching marriage as a kind of payment to the major for his kindness, and this idea of making a sacrifice of herself was fostered by her father, who never failed to point out that she might have done much better than engage herself to the major. At these times it was not without regret that she reflected how she might have married Mr. Standish. Had he not already pressed her to break her engagement?

With such a disposition, such tendencies, such temptation, and let it be added, such paternal misguidance, poor Mrs. Drummond could scarcely escape unhappiness. The deception she practised precluded her wiser friends from warning her of her danger, and releasing her from her own toils. Her connection with the Honourable Blake Standish, which began in a merely idle and unmeaning flirtation, under concealment attained the proportion of a serious clandestine love, and the increasing necessity for secrecy and precaution gave her unprincipled lover a command over her which he exercised to the utmost. It was

with actual sorrow she contemplated marriage with him; yet before she fully realised her position, the affair seemed to have gone too far for her to retract, and left her powerless at the mercy of Mr. Standish. She could not force herself to confess again to the major. To admit that she had been false without any adequately strong motive, was a degradation she dared not encounter. Almost in desperation, and as usual under a sudden impulse, she took the last fatal step. She gave her hand to Mr. Standish, was married secretly, and the same day left England with her child and her husband, writing only a few hurried lines of explanation to her father.

Mr. Pitburn was in his heart not displeased with his daughter for what she had done. Colonel Drummond's rank and place in society, rather than his good manly qualities, had been the main source of his satisfaction with his daughter's first marriage; but the gratification was still greater in being allied with a noble family. "My son-in-law, the Honourable Blake Standish," sounded so well that he repeated it four times in the letter announcing his daughter's marriage which he wrote to Major Godfroy. As to his daughter's future happiness, that was to this selfish man a matter of secondary importance. She must needs be satisfied, he argued, with what satisfied him.

His reasons for being satisfied were meagre enough. He knew nothing of Mr. Standish's family, of his resources, or of his position. He had met him at a club, and clung to him since with characteristic tenacity. The air of superiority assumed by the young man made him painfully conscious of his own shortcoming, and he would have regarded it as presumption to inquire into his personal affairs. The fact that he bore a title was accepted as a guarantee of his having wealth and high connections. Major Godfroy, however, required more explicit information.

Pale and agitated, the major entered Mr. Pitburn's office in Birchin Lane, and found the merchant looking over his bank-book with a cheerful countenance.

"I have come to learn more about this," said the major, in a trembling voice; producing the oft-read letter from his pocket.

"You know as much as I do, major. The sly little puss told me nothing of her intention," replied Mr. Pitburn gaily.

"You have not known, then, of their correspondence?"

"I knew that there was a little flirtation going on, of course."

"You said nothing to me of this."

"My dear major, I am vain enough to think that I am sufficiently capable of taking care of my child's welfare."

"Then you foresaw what has happened."

"I admit that her marriage with the Honourable Blake Standish entered into my view of possibilities."

"I am glad to hear that. You will be able to tell me who this Mr. Standish is, for that is the question that agitates me."

"I am happy to be able to relieve your agitation, major," Mr. Pitburn said with a laugh and a joyful wave of his hand; "this Mr. Standish is the Honourable Blake Standish."

"So you have said, but I want to know what his position is, and what right he has to the title of honourable."

"Gentlemen do not carry their genealogies written upon their shirt-fronts, and I am not in the habit of asking my friends how much money they have in the bank."

"You are justified—nay, it is your duty to make such inquiries of a man who you have reason to suppose will marry your daughter. I have not found Mr. Blake Standish's name in Debrett. I have not found it even in the Post-office Directory. You are a man of business, tell me—would you permit a man to take goods from your warehouse on the mere assertion of his being a solvent trader?"

"The case admits of no such comparison. A gentleman and an impostor are not to be mistaken; and allow me to say, major, that your personal feeling makes you not only ungenerous, but unjust."

"I pray it may be so!" said the major fervently.

"Ah, I'll vouch for his honour and uprightness!" Mr. Pitburn added confidently.

"I trust you may be right," answered the major in the same earnest tone. And he tried to hope the best, but he could not reconcile honour with such behaviour as that of the Honourable Blake Standish.

CHAPTER THE THIRD.

FORGIVING NOT FORGETTING.

THE truth became known before long. Blake Standish was an impostor and not a gentleman.

"This all comes," said Mr. Pitburn, "from looking on the sunny side. It is the only time I ever did think too well of my fellow-creatures; and I'll take care it shall be my last;" with which gratifying promise he retired behind his pessimist bulwarks and flung shots at the major, whom he blamed for all the misfortune that had come to his daughter, and all that was likely to follow.

Blake Standish—he dropped the flimsy fragment of a title as a tadpole drops his tail when there was no further use for it—spoke out plainly to his wife while they were sitting in the garden of the Casino at Grandville. "As we return to London to-morrow, Maud, we may as well come to business. I want money."

"There is still plenty in my purse, dear," said Mrs. Standish eagerly. He had been silent and unamiable all the morning, and his wife already feared him.

"Thanks," said he, with a short dry laugh. "When I say money, Maud, I don't mean fifty pounds." He took out a note-book and looking at it added, "We shall be back in time for the St. Leger."

"How much do you want?" Mrs. Standish asked nervously.

"A thousand will do—'Atalanta's' safe;" he spoke to his book, not his wife now. "I'll put the lot on if I can get a good price—say six to——"

"I have no more than twenty at the outside at home."

"Twenty *what?*" asked he with coarse emphasis.

"Twenty pounds, dear," she said, beginning to tremble.

"Where's the rest?—I suppose you've got a banking account."

"I—I—I have nothing except what Major Godfroy pleases to give me."

Her husband looked at her without speaking for a minute, as if he didn't wish by a word to countenance the terrible suspicion this announcement aroused.

"You know what I mean," he said presently, in a persuasive tone, "the twenty thousand your governor told me the colonel left behind him."

"That is settled upon baby."

"Settled upon that brat," he cried, casting a furious glance towards Doris, who was playing upon the sand beside her nurse at some distance. Mr. Standish had already expressed his dislike for children, and desired that his wife, when she chose to give him the pleasure of her society, should separate herself from her child for the time.

"You are deceiving me," he said, lowering his voice as some promenaders passed, and speaking through his teeth. "You are deceiving me; but you haven't a silly old man to play with now. I will know the truth. Come, out with it."

"I will not be spoken to in this manner," said Mrs. Standish with faint courage, as she attempted to rise.

He caught her wrist which was beside him, holding it with an iron grasp, but casting a careful glance behind him to see that he was not observed.

"You shall not move till you have told me the truth," he muttered.

"I have told you the truth, and you are hurting my wrist, and oh! let me go home!"

"Sit where you are," he said, with a fierceness which checked her rising tears with a terror unknown to her before. "Your father told me," he continued, "that the colonel had left nothing to his friend Major Godfroy, but willed it entirely to you and that child."

"It is true, Blake, quite true. The capital is left to Doris, but the interest is mine."

"Ah! that's something."

"It amounts to a thousand a year, and more than that, and the major has always given me as much as I desire. Doubtless if I wanted the whole of the interest he would let me have it."

"He can't refuse to let you have what is yours, can he? I should like to know what he can have to do with it now you are married again."

"The money is left in trust, I think he calls it."

"In trust!" Mr. Standish clenched his teeth and looked into the distance with such an expression as a baffled fiend might wear.

"What does it matter, dear?" whispered the pale wife, stealing her hand under his arm. "You are rich, and I have more than enough for my own wants. You never mentioned the subject of money before we were married. Don't you remember saying that had you been King Cophetua and——"

"In winning a wife or selling a horse a man's not supposed to tell the truth. I might have said a hundred things I did not mean. I married you for your money; I don't mind speaking the truth now. What else should I marry for? I'm not often taken in, but I admit you cheated me with your tears and sighs. You deceived me, and you deceived the major—so much the worse for you. But you'll find out your mistake soon enough; I suppose cheating is a family accomplishment. Your father may have prospered by it, but you—don't make an exhibition of yourself. If you want to cry, go to the hotel. I can't stand it, I can tell you, for I'm angry." With these words Blake Standish rose from the seat and lounged away, biting the end of his cigar into shreds, and in this brutal manner he dismissed his wife.

Bowing her head and hurrying along to conceal from the passers-by the tears she could not repress, the poor woman returned to the hotel, and there threw herself upon the floor of her room in an agony of remorse and shame, and grief, that seemed as if it must kill her or deprive her of reason.

But her hour of release was not yet come. The physically strong are not killed with the first dread blow of grief; the cliff is not overthrown until its foundation is sapped—wasted and fretted away by continual aggression. Long, long months of anguish, years of dull-enduring misery she suffered before she broke down under the systematic cruelty of her husband, and her own bitter self-reproachings. She ceased to smile even upon her child, whose future she accused herself of having heedlessly wrecked by her own folly and falsity. She had robbed her own little Doris of a loving father, and given her in his place one tainted with vice, brutal and coarse, malignant and cruel, who, if he could, would poison her very soul. The man said one day, "I shall live to get the best of this bargain now; for when you go, thanks to the agreeable laws of England, I shall have Doris to make use of. I can get as much out of the major on her account as I have got on yours, and by the time she is eighteen she'll love her stepfather so dearly, that for her life she will not dare to refuse him what he wants of her inheritance."

Whether this threat was based on a legal fact or fiction Mrs. Standish did not know. She dreaded her husband to such a degree that no threat of his seemed impossible. The fear of such a fate befalling her daughter brought her mind to the very verge of insanity. Night and day she dwelt upon this theme. She could not sleep, and only forced herself to eat by the dread of leaving her little Doris to the mercy of her husband. She took cold, and her constitution now giving way under the long strain upon it, had no longer the force to resist disease. The cold settled upon her chest, and before three months both lungs were clogged with tubercles. The doctor told her plainly that the only chance of her outliving the winter was in her immediate departure for Nice.

"This is a fine state of things, upon my word," said Blake Standish, thrusting his hands in his pockets, and looking as if he were the injured one.

"I can take Baines with me. I do not ask you to accompany me," said Mrs. Standish.

"I should think not, with Newmarket coming next month. I'm thinking of the expense. But I suppose you must go, or I may get into trouble. However, you shall write to Godfroy—tell him you have to leave England by the doctor's orders, and can't do with less than seven hundred to take with you—I shall want all that."

Mrs. Standish wrote the letter, and after her husband had read it and approved of it, she added a postscript.

"I may not survive the winter," she wrote, "I am going to Nice. For the love of my Doris I implore you to come to me there."

Major Godfroy needed no such powerful appeal as this. He had exhausted his ingenuity in trying to obtain an interview with Mrs. Standish. Her husband had commanded her not to see him, and his commands had been supported by her own dread of facing the man she had deceived. The major arrived at Nice before Mrs. Standish. He was upon the platform of the railway station when she stepped down from the train. He knew she had suffered; he guessed too truly the real character of the man in whose power she had placed herself; he expected to see an altered appearance in her, but the wreck of the pretty widow he had wooed only four years before made him doubt his own senses when he saw her.

Doris was no longer a baby. She stood upon the platform while the attendant, Baines, helped her mistress to descend from the carriage.

"Poor mamma. Tate tare you don't fall!" cried the pretty child, catching her mother's hand as she tottered to keep her feet.

Two men passing the little group looked at her, and then at each other with significant expression. The sight of a woman coming there to end her days is not uncommon upon that platform.

"Take my arm, my child;" said an old gentleman in a soft, low tone, coming to her side.

Mrs. Standish looked up in the speaker's gentle face, and recognising Major Godfroy, passed her quivering hand under his arm. What grievous wrong she had done since last she touched that arm, and yet he forgave her all, and spoke just in the sweet voice of old. *He* did not change.

Doris fixed her eyes upon the major for a moment, in childish curiosity, then she trotted round to his right side and took his soft white hand.

The major placed her in a *voiture*, and they drove to an hotel commanding a view of the marvellous blue sea. They sat among the myrtles and oranges in the soft evening light, the major keeping up a flow of small talk—mere gossip that called for simple "yes" and "no" in reply, and allowed the poor creature by his side to follow the thread of her own thoughts and his.

"Why have I feared this dear friend?" she thought. "He cannot hate or despise the weak, only love them and find happiness in cheering their hearts. I have never known him, so it seems, till this moment. . . . Nothing to dread, nothing to fear, as I sit by his side. He will let no harm come to me or my little Doris, and I shall get well and strong again, to teach my child the lesson I have learnt so painfully, and guard her from the evils that have befallen me. . . . How gentle yet how strong he is—like the great sea itself, now so passive and so beautifully calm. Yes; I shall get well again, if he will stay with me patiently awhile."

Indeed, after the first week in Nice, Mrs. Standish showed such improvement in her health that it seemed not unlikely she would recover before the winter actually came. She gained strength of mind as well as of body, and resolved when the winter was past to return to her home, and try by patient obedience and cheerful willingness to win her husband to a kinder mood. She wrote to him in this spirit. "If you are better, you had better come home at once; especially if you have determined to behave like a rational woman," was the reply she received. How could she combat against so stubborn a cruelty as this? how hope to subdue so obdurate a nature? and if her heart sank before these difficulties when she felt strong, and with the encouragement of a friend beside her, how could it stand when her strength failed, and the friend was absent?

One morning she walked from the hotel into the garden, where Major Godfroy was sitting with Doris on his knee, telling her a "nonsense story," as he called the gossiping history of a child's life in fancy-land, which was always to be continued, and which ever broke off in a too interesting part for his hearer—and took a seat beside him, with a little sigh and an expression of fatigue which did not escape the major's quick glance.

"And so the night came, and they all went to sleep," continued the major, drawing his story to a rapid conclusion; "and they won't wake up until their sleep is over, so there's nothing more to tell at present."

"Oh!" expostulated Doris.

"Kiss me, darling," said her mother, drawing her to her bosom. "Now go to Baines; mamma wishes to talk."

She had a letter in her hand, and when the child was gone she put it into the major's hand. He opened it and read it—seeing that Mrs. Standish intended him to do so.

"You talked last week of being strong and well," the writer said; "if that is the case, you had better come home at once. Newmarket has landed me, and you'll have to do all you know to get me out of the mess. I must have at least a couple of thousand. If necessary, you must see the 'old soldier;' and the less jolly you look on that occasion, the more easily his sympathy may be aroused to advance the sum I want."

The major quietly turned over the page to read the signature—"Blake Standish." It was hardly necessary.

"What shall I say?" asked the wife, looking up with her anxious eyes into the major's face.

"Nothing," he answered; "a letter of that kind does not require an answer from you." His lips closed

firmly, his brows bent, and, unconsciously, his fingers gripped the handle of his cane.

"But if he gets no reply, he may come here," said Mrs. Standish timorously.

"Let him come," answered the major, with quiet firmness. "If the law of England will not shield you, there is no law here which shall make me yield you into his hands."

"But he has the power—he has told me so—to take my Doris away, and he will."



"POOR MAMMA! TATE TARE YOU DON'T FALL" (*p.* 423).

"Not while I live!" he exclaimed with a still fiercer accent, rising to his feet and striking the ground with his stick.

Mrs. Standish breathed quickly; the colour came to her cheeks and brightness to her eyes. A champion, resolute and reliable, had come between her child and evil.

She also rose, and laying her trembling fingers on his arm, she said—

"I have not yet told you why I asked you to come to me here, dear friend—may I tell you now?"

"Yes; sit down, my poor child, you are weak this morning," he replied, leading her back gently to the seat, and taking a place beside her. She bowed her head, unable to speak for some minutes; then she said—

"I did not ask you to come here that I might be forgiven. I did not expect that; for I believed I had lost my claim upon your pity. I have always been thoughtless and blind, or I should have known your generosity better. But it is not of that I want to speak to you." She paused again, reflecting for an instant, perhaps on her own sorrows and losses, and the past which could not be redeemed.

The major did not interrupt her thoughts. He pressed her hand with gentle reassurance and waited.

"It was the knowledge that I had not long to live which made me write to you in my terrible anxiety. I have no friend in the world but you. I stood quite alone and I thought, Who will protect my child, George's child, dear Doris, when I am gone? For her sake I dared to face you. Your sympathy gave me strength and I fancied I might recover, and be spared to guard my child. The feeble hope has forsaken me to-day. It seems as if the night were coming."

"You are stronger and better. It is only this letter which has shaken you," said the major encouragingly.

"It may be so. I may grow strong enough to return to my—my duty. But at any moment I may fall. It will be better for Doris, happier for me to part with her than to keep her for a few months and then to leave her in the power of that man. Will you save her from that fate? Will you shield her from harm?" she asked imploringly.

"With my life," answered the major.

"Take her from me—take her where that man may not find her, and leave me here. He can do me but little harm now."

"Peace, my child, peace!" said the major gently, seeing the struggle of the poor woman to control her agitation. "Doris and you shall live together in safety. No one shall part you nor harm you while I live."

She pressed the major's hand convulsively, and the tears flowed down her wasted cheeks. She did not sob, but sat still and silent, crying.

Little Doris from the distance saw her mother's grief, and regarded her with covert glances for awhile, letting the ball which Baines had thrown lie at her feet. She had seen her mother in tears often and been sent away at such times, kindly by her mother or harshly by her stepfather, and had come to regard them as a sight which she should not see. She feared her stepfather, and would frequently leave the room without bidding, in silence, when mamma cried; but she loved Major Godfroy and had no fear of him. And as he bent over the weeping woman, encouraging her to hope, the child crept over the grass, and quite unnoticed sat down by his side, and only when a sob rose from the little one did the major find that he had two unhappy souls to comfort.

* * * * * * *

The major took on himself to fetch Mrs. Standish's letters from the Poste Restante. He recognised one in the hand-writing of Blake Standish, which he opened without hesitation. The man concluded by his wife's silence that she had not received his letter. He desired that if she were too ill to write she should dictate a letter to Godfroy demanding money, without mentioning the fact that she was alone. Money, he insisted, he must have at once, or the consequence would be unpleasant, not for himself only.

The major struck a vesta, and burnt the letter. Two days after he found a telegram waiting. It ran thus:—"*From Blake Standish, Brompton, to Mrs. Standish, Poste Restante, Nice.*—Telegraph your address at once. You will see me within forty-eight hours."

The major replied at once, and in this manner:—"*From Major William Godfroy, Nice, to Mr. Blake Standish, Brompton.*—I am in Nice, and if you cross my path it will be the worse for you."

Forty-eight hours passed and Mr. Blake Standish had not fulfilled his intention. As many days elapsed and yet he did not come; so he never saw his wife again, for by that time, poor soul, she was dead and at peace under the myrtle planted by her little Doris.

END OF CHAPTER THE THIRD.

MY EXPERIENCES OF HOSPITAL CHILDREN.

BY A PROBATIONER.



"HAVE you many children in your hospital?" "How do they behave?" "Are they as preternaturally good as the story-books represent?" These and similar questions were frequently asked of me whilst I was engaged in nursing. The subject seems to have a fascination for many people. Lovers of children may perhaps feel interested in a short account of some of our little patients.

We had no ward specially devoted to children, but in the women's wards there were always a certain number of cots, greater or smaller according to circumstances, which never stood empty for long.

Little, pale, pinched faces smiled at us as we passed, or puckered into doleful wrinkles as medicine-time approached. Little voices called us, whilst we moved about at our work, weary sometimes with pain, more often wonderfully happy and content. I think every nurse, worthy the name, loves to have children under her care. There is something so pathetic in their patient helplessness. It is such pleasure to watch their recovery, to see the smiles and the roses coming back to the wan faces, to try and win the first laugh from the sad little mouths.

It is really remarkable how quiet, contented, and well-behaved the children of the poor show themselves during sickness. Probably the cleanliness and cheerfulness of their surroundings, the attention and kindness they receive, form so great a contrast to their every-day life, that it leaves no room in their minds for discontent. However this may be, it is rare to find a child in hospital who gives wilful trouble to the nurses, and rare to find one not actually suffering pain who is fretful or peevish.

The smallest specimen of humanity that came under my notice was a little boy, barely three months old; such a thin, shrunken baby he was, he looked hardly

more than six or eight weeks. He was quite a remarkable case in his way, for his leg had to be amputated at the thigh, and he went successfully through the operation, and made an excellent recovery. Hospital life seemed to agree with him, for he grew quite saucy, and noticed things in a wonderful way. He distinguished between the nurses—had his distinct preferences amongst them. He took great pleasure in being carried about and danced up and down at a window, and remonstrated lustily when laid down before he was quite in the humour.

He was a very important little gentleman, and had a special nurse night and day. He was visited by several eminent surgeons, and from the solemn air of dignity assumed by him on such occasions, one would think he fully realised his own importance. He was taken home almost well after a time. I sometimes wonder how he will learn to walk.

The first time I had anything to do with the care of a baby was soon after I had entered the hospital, when I was suddenly summoned from a male ward, to take the charge of two little children in diphtheria. I found them lying in one bed, over which a tent had been erected to shut them off from the ward, and to retain the moist warm steam that issued from a little apparatus kept constantly at work, and which was the only atmosphere they could breathe. The girl was nine years old, her little brother only thirteen months. They had been admitted in the middle of the night. They were the only two surviving children out of a family of six, all the others having died within three days of the same disease, brought on by imperfect drainage in the house where they lived.

Both children were breathing with great difficulty, and coughing from time to time in a hoarse, dry way. My instructions were to watch them, and summon the head nurse immediately if they showed symptoms of choking. The baby was the worst. The poor little fellow tossed about in great distress. It was most painful to watch his struggles for breath. I wrapped him in a blanket and took him on my lap, when he became a little easier; but as the hours went by he grew perceptibly worse. Treatment failed to give any relief. It was plain he could not live many hours, unless operative measures were taken. The house surgeon was summoned, and tracheotomy performed then and there; but even that proved of no avail. The poor little fellow never came back to my care. He died almost immediately after the operation.

The little girl recovered. She was a strange, sullen child, very hard to manage, especially during the critical stage of her illness. It was difficult to get her to speak, eat, or take medicine. She seemed to distrust every one about her. But long before she left she had learned to look upon things very differently. She would run about after the nurses, and talk and laugh quite merrily. She grew docile and obedient, and her parents said there was a wonderful change for the better in her. By the time she was well enough to be sent to the convalescent home in connection with the hospital, she looked altogether another creature.

Among my "hospital pets" there is one whom I shall always remember with peculiar distinctness. He was a lovely little boy of two and a half, with soft golden curls clustering all over his head, and the prettiest complexion in the world.

For some time after he came in he was perfectly well. He had a little cyst in his neck, through which a wire had been passed to cause it to suppurate; but until that commenced he felt not the slightest pain or inconvenience, and ran about the wards all day, to be petted alike by patients, doctors, and nurses.

He used to wear scarlet flannel frocks and clean white pinafores, and he looked quite a little picture.

He was the most joyous child I ever saw. He made a game of everything he did, and would stop every few minutes in the midst of his play to laugh in the very ecstacy of enjoyment. His mirth was infectious. It was impossible not to join in his ringing laughter. He used to trot after me into the men's ward (in which I was nursing as well as in the women's), and I have seen every one of those great working men convulsed with laughter by just hearing that child laugh.

He was an immense favourite with the men, and it was pretty to see the great rough fellows following his movements with admiring glances, and the broadest smiles, calling him from one bedside to another, vying with each other to obtain his notice and approval. Had he been a little girl he would have been pronounced an arch-coquette, for he played off his admirers one against the other, favouring now this one, now that, after the manner of an accomplished flirt.

His one and only trouble during the day was the visits of the surgeons, when silence was imposed upon the patients. He did not at all understand why he must stop his merry prattle, and his face took a comically rueful look when we held up our fingers to him with a warning "Hush!"

Soon, however, he thought of a grand new game. He would watch till he saw some students talking together, and would then march up to them, or even to the surgeon himself, lay his finger on his lips, and say "Sh—sh!" with an air of solemn authority that was irresistibly ludicrous.

He quickly noticed that one or more of the nurses always carried towels over their arms in accompanying the surgeon on his rounds, as he frequently required to wipe his hands or wash them after examining a case. Teddy saw no reason why he should not carry a towel too, so he would beg for one, and carry it sedately over his tiny arm, offering it indiscriminately to any student to whom he happened to take a fancy at the moment.

When at last the surgeon's visit was over and he and his train had departed, Teddy would dance gleefully about, wave his arms over his head and cry, "They've gone! Hooray!" a formula which had no doubt been taught him by the men, as he had never been heard to use it before his visits to their wards.

I think every one in the hospital who ever saw him, was sorry when little Ted went home. I missed him

specially, as his very favourite game was helping me to collect empty bottles, and put out full ones. He knew exactly at what times I should visit the ward cupboards, or the patients' lockers, when the stimulants would be given round or the medicine bottles collected, and was always there ready and eager to help; and his boundless enjoyment in the task gave a real sense of pleasure to these very trifling and monotonous duties.

Children who have been much in hospital become sometimes most wonderfully and amusingly precocious. I remember one little girl of four years old, who was admitted into one of our medical wards. She was very small and white, but evinced the utmost self-possession, and never cried or looked frightened when her mother left her. There was no cot empty at the time, so she was put into an ordinary bed, in which she sat up, with her wrapper over her shoulders, watching all that went on with an air of dignified superiority, and answering all questions with the utmost readiness. She smiled when I brought her picture-books to look at, and turned them over once or twice; but her manner rather implied that looking at pictures was a more childish amusement than she had been accustomed to.

"Well, little woman," said the physician, when he paid his first visit, patting her head kindly, "and what is the matter with you?"

"Chronic Bright's disease," answered this small mite, with perfect readiness and composure.

"Yes, it is," she continued, looking severely round upon the students who had interrupted her words by a burst of laughter and were still convulsed, "it's chronic Bright's disease, brought on through a chill taken after scarlet fever, when I was a child."

We found out that she had been for many months a patient in Westminster Hospital, where she had evidently picked up these interesting facts relative to her condition.

"Have you much difficulty in persuading children to take their medicine?" is a question often asked. As a general rule, children are particularly good about this. It is wonderful how quickly they often get to like an oily medicine. But even if they do not like it, I have had seldom any real trouble in getting them to take it.

I suppose every nurse has her theories about the management of children. I know I had mine, one of the grandest being that it was *never* necessary to use force with them. Firmness, kindliness, and tact were all that were needed under any circumstances to overcome resistance. The more I had to do with children, the more strongly did I hold this belief. Indeed, I may fairly say I hold it still; nevertheless, I am bound to confess that on two occasions during my year's experience I found my theory break down utterly. Once was on this very point—the taking of medicine.

A little boy of four years old was brought in one evening whilst I was off duty. The next morning I was warned by both day and night nurse that it was impossible to induce him to take his medicine, and it had to be administered by force.

I listened to these stories with a smile. My thought was, "Now is the time to see what *I* can do." I had very little doubt but that *I* should be able to reduce him to obedience, though others might have failed.

When medicine-time arrived, I approached his bedside. I thought perhaps the sight of the old medicine cup might alarm him, so I found a little ornamental cup with pictures on it. The moment he saw me come he hid under the bed-clothes; but a little coaxing and remonstrance induced him to sit up and face the question bravely. He even got so far as to say he would drink it, to take the cup in his own hand and put it to his lips, but there his courage failed completely. No words of encouragement, kindness, banter, or severity produced the smallest effect. I was defeated at all points, and had to admit it with what grace I could.

Every dose of medicine that boy took had to be administered by force, one nurse holding his hands and his nose, and another pouring the draught down his throat; whilst his screams during and after the operation were so great a disturbance to the ward, that it was a real relief when in three days' time he was well enough to be sent home.

The patience of children who have to keep always in one position is often most touching. I remember two little girls of four and six who lay month after month, flat on their backs, with some form of spinal complaint, unable to sit up, unable to play, only just able to turn over picture-books, and soon tiring of that. And yet the sweetness and contentedness of both those children was wonderful. Every time you passed they would greet you with smiles; a single word would bring laughter and merry answers. A new picture or a flower would keep them silently happy all day. In a re-arrangement of the ward for cleaning purposes we moved the two cots side by side, and then the little ones seemed to have nothing left to wish for. Talking to each other was a new pleasure, and one of which they never tired.

But I must not confine myself entirely to the very little children. We have very amusing specimens sometimes amongst those more advanced in years.

Boys over seven are sent to the male wards. There was one little chap of eight brought in one day with a badly sprained ankle, who was a most comical and original child. He had excellent spirits from the very moment of admission, and made himself quite at home.

"I've bin in this place before," he confided to me at an early stage of our acquaintance, "only then I was in the ladies' ward."

I asked him which he liked better.

"I likes the men's ward best, 'cause the paper-man don't come into the ladies' wards. I likes buying papers."

He was kept pretty well supplied with coppers, which he mostly spent on illustrated papers, which the newspaper vendor brought round each morning. Sometimes he would save up his pence in order to

have his hair cut when the barber came round, an operation in which he seemed to take a deep and mysterious pleasure.

"Nurse," he called to me one day across the ward, "which do you love best, the barber or the paper-man?"

He was very fond of the house-surgeon, whom he called "my every-day doctor," and would ask him the most absurd and extraordinary questions.

He took a great interest in me and my family. If I happened to write a letter in the ward, he would always send his love to my sister or friend, invariably adding, "Tell her I hopes she comes to see me soon. I likes her, I does."

He was a generous little fellow too. I was telling him one day about a little boy in another ward, just his age, who had had to lose his leg. He listened with great interest, saying, "Poor Charley!" now and then, and by-and-by dived down and began searching in the basket under his bed, till he produced several of the illustrated papers he kept stored there.

"I want Charley to have them," he explained. "Give him my love, and tell him I hopes he'll soon be better."

It was whilst Freddie was in the ward that the second collapse of my theory occurred, as before mentioned.

I was summoned to the ward one day by the staff nurse, to see if I could do anything with a little boy who had been brought in, and who absolutely declined to be undressed or put to bed. The injury was only slight—a rather nasty cut of the under lip; but as the weather was very severe, and he lived at a distance, he had been admitted as an in-patient.

I first tried talking to him, and found him quite ready to answer, and hoped things were not so bad as had been represented; but on the first attempt to take off his jacket, he wrenched himself away and prepared to scream. I took him across to Freddie's bedside.

"Now, Freddie, tell this little boy, is this a bad place to be in?"

"No, it's a very nice place. They're all very kind. I likes being here, I does," and with his unfailing good-nature he produced some more pictures, which he handed over to the new-comer.

Then we tried again, nurse and I together, talking cheerfully and ignoring his struggles; but it was no use. The matron happened to come in, and she tried, her experience of children being large, but she failed too.

Then by her orders the ward door was shut, whilst she, the nurse, a convalescent patient, and I undressed him by main force and put him into bed; and it was all that the four of us could do to manage it, whilst his piercing screams brought students hurrying from all parts of the building, thinking some awful accident had occurred.

In justice I must say that after this one exhibition, when he found that no one was really going to murder him, he was as quiet and well-behaved a child as one need wish for.

I must not weary the reader by further details. I have given a truthful account of my own experience of nursing amongst sick little ones, with examples alike of bad and good. I have endeavoured to be accurate in my statements. In conclusion, I would say that if there are any people who entertain doubts of human patience, gentleness, and fortitude under sickness and suffering, those doubts would be quickly removed by a little work amongst hospital children.

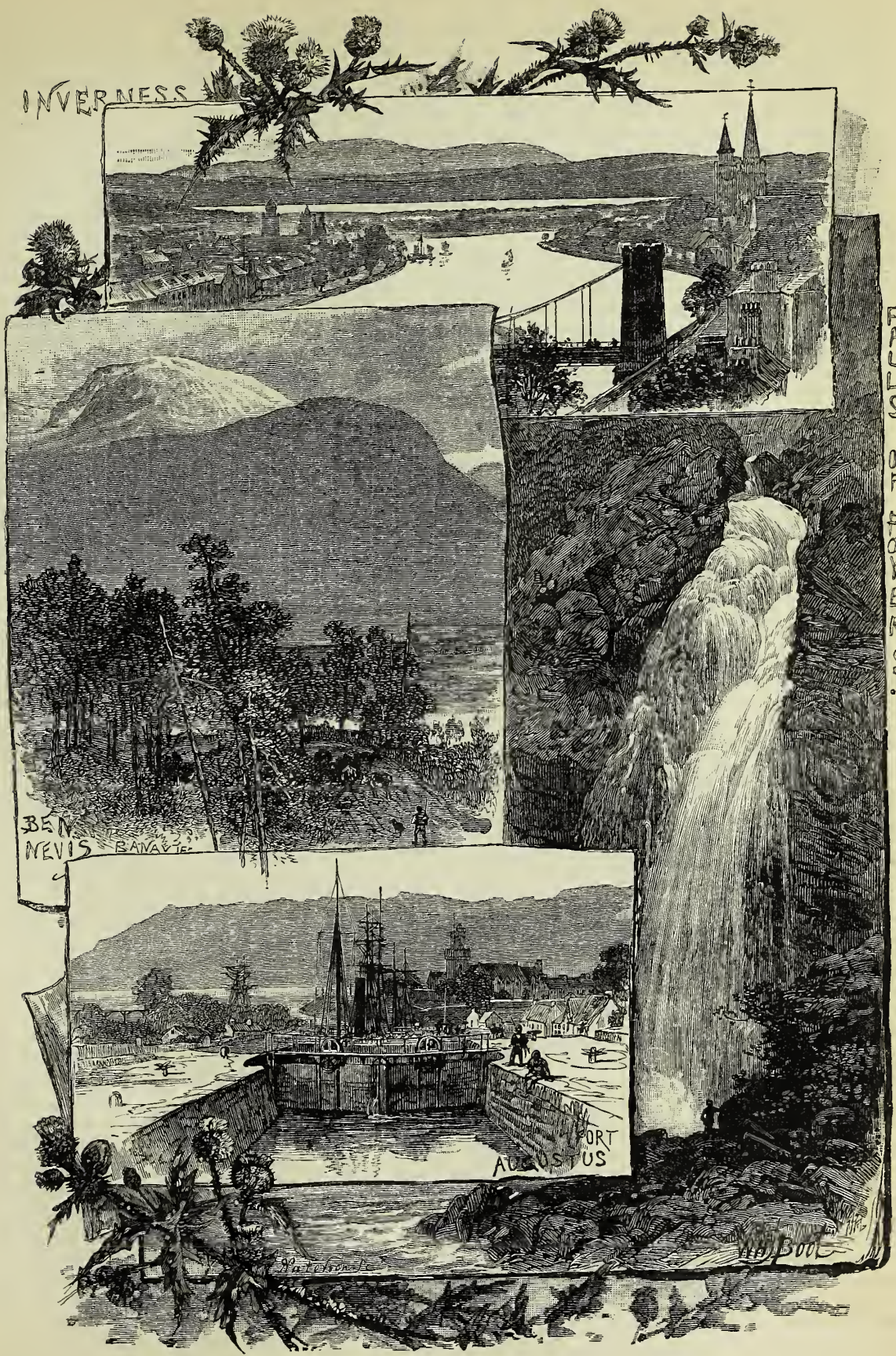
OUR CALEDONIAN CRUISE: A WEEK IN SCOTCH WATERS.



GLENGARRY CASTLE.

From photograph by J. Valentine and Sons, Dundee.

"WHAT will he do with it?" It was not the popular story of that name which excited our curiosity, as we sat, one July evening, at the window of a pleasant house at Glasgow, overlooking Kelingrove Park. We were intent on knowing the Young Man's decision as to the disposal of a week in Scotland. We had determined upon abandoning ourselves to six days' freedom, fresh air, and fine scenery; but the task of deciding where to go when you are in the beautiful northern land is always a distracting undertaking; there is so much that is attractive; and one place of scenic grandeur and historic glory challenged another for our company. Burns' Dumfriesshire and Ayrshire district suggested itself, only to be outbidden by Sir Walter Scott's Border country. The Old Lady had not been to Edinburgh, and surely a week would pass all too quicky at the "modern Athens." Macintosh had been very eloquent about the variety of the island of Arran; and then how we could enjoy ourselves at Oban, with trips to Staffa and Iona! The Trossachs and Lochs Lomond and Katrine appealed to us, and their invitation was hard to decline. Then how delightful would be Braemar! while Rosette would like to see far-off Stornoway, and present her loyal homage to Shiela, the Princess of Thule. And if we might not go so far north in so short a time, the fair girl pleaded, was there not Skye?



From photographs by J. Valentine & Sons, Dundee, and G. W. Wilson & Co., Aberdeen.

and she added something about Flora Macdonald. We could not decide. There was, indeed, some danger of our following the example of De Quincey, who, having on one occasion six hours to spend in London when passing through, spent them on the steps of the hotel, utterly unable to decide what to go and see; or of our imitating the philosophical donkey, mentioned by a classical writer, which perished between two bundles of equally appetising hay, because it was distracted as to which bundle it ought first to eat. So it was left to the Young Man to decide the difficulty, and nothing could have exceeded his wisdom in the matter. There is throughout the year, independent of the tourist season, a tour in the Highlands occupying just one week: the trip of the *Staffa* from Glasgow to Inverness and back. "We should steam down the Clyde," he said, in zestful anticipation; "we should have an experience of an Atlantic swell when going round the stormy Mull of Kintyre; we should pass through the famous Sound of Jura; we should call at Oban, and many other interesting places; and in going over the Caledonian Canal we should traverse some of the loveliest lochs in the world. What could be more enchanting?

In asking you, reader, to join us in our trip, permit me to introduce you to our little company. The five feet eleven of humanity, with the wide-awake and the long iron-grey beard, which is laughing so immoderately, is the Young Man. He has seen his sixtieth birthday, and unites with the wisdom of age the elastic energy and gay vivacity of youth. And it is because of this juvenile freshness that his friends invariably dub him the Young Man. He is known, indeed, to his wife—the Old Lady—as the Boy. The gentleman whose broad shoulders so set off his Tam o' Shanter is Macintosh, a Glasgow artist, whose Scotch landscapes are not unappreciated on the walls of the Royal Academy. The animated lass, with the soft, dark, eloquent eyes, to whom he is talking so earnestly, is Rosette.

It is eleven o'clock on the Monday morning that the *Staffa* leaves the busy, crowded wharves of the Clyde at Glasgow, and picks her way through the shipping of the great commercial river—past foundries and ship-building yards, bright with flaming forges, and noisy with echoing hammers; past mighty warehouses and stagnant timber-pools; past docks and dye-works, chemical manufactories and whisky distilleries. A river of ink and stink. Banks of work and dirt. Buildings of toil and moil. If Macintosh had no other ambition, he would make a capital guide to Scotland. He denotes every point of interest we pass, explains the process of dredging the Clyde, and points out the great ocean steamers that seem to dwarf the *Staffa* into undeserved insignificance. The little river to the left is the Cart. Three miles up this stream is Paisley, eloquent of rich shawls and poor poets. The story Rosette is laughing over is about the town once boasting three hundred starving bards, who had only one Sunday coat among them. Whenever one of these men of genius died, appreciative Paisley forthwith raised a stone to his memory, until one of the survivors protested against the custom of their being denied bread and being given "a stoon." And now the Clyde widens, and Dumbarton Castle, on its rocky isolated crag, rises to our right in sheer steepness out of the water. The river Leven joins the sea here from Loch Lomond, and beyond, behold! Ben Lomond—most beloved of all the Scottish Benjamins—breaking the clouds twenty miles away. In the afternoon, when we reach Greenock—where some ironclads belonging to the home squadron add to the interest of the estuary—we begin to know the *Staffa* and her crew, the first mate of which is Rona, a dignified retriever dog, very select in her friendships.

At Greenock the Clyde widens into the sea, and there is the sweet salt savour in the air, instead of the febrile ferment of reeking chemicals and sewage filth, which defies deodorisers, and renders the problem of the purification of the river impossible, even by the most earnest and enterprising Corporation in the United Kingdom. The scenery now grows in interest and variety, and a fresh picture is presented every minute. The Argyleshire hills rise in bold broken outline in front; Loch Long stretches far away to our right. We have another view in the pearly haze of Ben Lomond. Bute and the Greater and Lesser Cumbrae seem to float like clouds on the sea. All along the coast, pleasant houses are mixed up with the trees. The eyes takes a mental photograph of the ruins of Dunoon Castle; the lantern in the Cloch Lighthouse flashes back the strong sunlight; the water everywhere is as blue as the heart of a sapphire.

Rosette is on the bridge with the captain. She wonders how Scotchmen, having so beautiful a country, can ever find heart to leave it. The scenic beauty increases in charm as our course is pointed down the channel, with Bute close to our right, and the two Cumbraes as close to our left. The impression left by these pictures has not had time to leave us before Arran, with its mighty peaks, arrests the eye. The clear light brings out every point of these bold mountains. The small island which looks as if it were part of Arran is the Holy Isle; behind it is Lamlash Bay; above is Brodick Castle, the seat of the Duke of Hamilton.

We are now on the Atlantic. There is a blithe breeze that flutters Rosette's ribbons; but the sea is a calm plain, as blue and placid as the sky. Far away to the left towers Ailsa Crag, standing solitary, like an ocean milestone. The Young Man is absorbed in feeding the gulls which follow in the white wake of the boat, with the vivid light catching their snowy plumage. If ever we have a family picture of him it must be as he stood on the bridge of the *Staffa*, with a great pile of broken bread and biscuits by his side, which he ever and anon throws to the swift sea-birds. There is a fierce competition for the larger pieces, accompanied with an amount of bad language in ornithological Gaelic, that would, no doubt, be very shocking if we could only understand it.

And now we have passed the Pladda Lighthouse, and are steering for the Mull. Evening is stealing over us. In the west there is a sunset that fires sea

and sky with a conflagration of colour. The water dazzles the eye with its metallic radiance; it has a mirror-like luminosity as of liquid light. The peaks of Arran behind show a pronounced purple against a strange clear green sky; far away in front is the yellow glimmer of the Davaar Lighthouse, on a little island at the entrance to Campbeltown Lighthouse. The sun has gone down, and yet there is a strange magical light that belongs to neither sun nor moon. The day is done, but there is no night.

The next morning, when the first of our company turned out of the comfortable cradle in which he had been rocked all night, the decks were streaming with wet; a cold white mist had settled over a dark and fretful sea; the lonely islands past which we were steaming—Colonsay and Scarba—were sponged out of view. Everything was damp and dismal. Rosette could comprehend now how it was that Scotchmen left a country in which it had never really been dry since the Flood, and called to our grateful memory the passage in one of Mr. William Black's pleasant stories describing "the astonishment of Sandy MacAlister Mhor on beholding a glimpse of sunlight." We were really in the Highlands now, and this was the weather which welcomed us. "It's coin' to pe a saft tey!" was old Mackenzie's salutation to us as he stood on the bridge, directing the vessel's course. He seemed heedless of the rain. He did not even wear his stout pea-coat. Perhaps this blinding wet was, after all, only a "Scotch mist." Anyhow, one of the crew said respectfully, "I don't think we shall hef any rain to-tey, whateffer."

We had called at Crinan, and escaped the whirlpool of Corryvreckan—although we had seen and felt its circling currents; we had touched at Craignish, at the Island of Luing, and at Easdale, and now we were standing in for the Sound of Kerrera. Breakfast was over, and we were all on deck to catch the first sight of Oban the Beautiful. And lo! the little capital of the Western Highlands was smiling under her veil of mist. The rain had not altogether ceased, but a sudden gleam broke the leaden cast of the clouds, and a soft suffused light showed that the sunshine was not far away.

The *Staffa* had a considerable amount of business to transact at Oban. The quay was very busy, and while the Young Man was contemplating the picturesque scene of confusion, Macintosh had hurried the ladies away to Dunollie Castle, a grey old historic ruin at the northern end of the bay, clung to by the glossy ivy, and sung to by the glancing sea. We had been on shore an hour or two when the steamer's fog-horn warned that the work of discharging cargo was completed. When we got under weigh again, we found that the number of steerage passengers had been largely augmented by a company of fishermen from Skye. They were on their way to the East Coast fishing-grounds. Their talk is all in Gaelic; but they are physically vastly disappointing as specimens of Highlanders. The purser tells us that the *Staffa* often conveys such companies. They are very quarrelsome, and sometimes the ringleaders of a quarrel have to be put in irons during the voyage. On one occasion, when the decks were red with blood, a hose-pipe with hot water from the engine had to be used to quell the disorder.

The mist is stronger than the sunshine as we steam out of the sheltered bay. There are livid gleams in a grey sky; there is a gusty sea; Kerrera is shrouded in rain and mist; green Lismore ("the Great Garden") is but a leaden patch of shore; the mountain masses of Mull are hidden beyond the ragged driving clouds. But the captain is as blithe as sunshine, and takes Rosette up on the lofty bridge with him, and ever and anon there comes a musical laugh from that wind-swept eyrie at one of his "good 'uns."

For instance, he invests a large tor jutting out from the water close by Dunollie Castle with a mystic legend. Many years ago, he says, when Dunollie Castle was in possession of the M'Dougalls, the chief threw a great stone across to the chief of the Macleans, at Duart Castle, on the island of Mull. Maclean responded by throwing across this rock, which remains on the shore where it dropped to attest the truth of the story! The stone is many tons in weight; "but they were strong men in those teys," pleads the captain—"the Macleans are strong in the head in these times." Macintosh, who has a staunch faith in Ossian, maintains that the self-same chunk of conglomerate is the *Clach-a'-choin*, the Dog-stone to which Fingal bound his dog Bran.

We are, indeed, in the very heart of Ossian's country, and the strange atmospheric effects—the glory and gloom of the clouds, the sad greys and sudden greens—are to-day in sympathy with the spirit of his genius. A wild gleam of light strikes the massy outlines of his Mull mountains; in front is stretched his "misty Morven;" close by is Connel, with his "falls of Lora" still chanting a melancholy refrain to the silent and solemn hills. We skirt Loch Etive, with the burly Ben Cruachan keeping solemn sentinel over its lovely reaches. Then we enter upon the lonely beauty of Loch Linnhe, silent but for the sea-birds. The voyage never becomes monotonous. A fresh picture is presented every minute, and every turn of the scenery seems to be beheld under a different light. Macintosh and the Young Man are emulating Dr. Johnson in disputatious anger over the authenticity of Ossian—whether he was a man or a myth—when we pause at Appin. The *Staffa* stops long enough to give us time to inspect a strange rib of rock, forming a natural arch some little distance down the shore. A seal is sunning itself on the rocks. His soft, intelligent eyes give a pained look at Rosette's coquettish hat and jacket—as if they recognised in the dark fur the coat of some near relation—and then he drops down in the water like a plummet, and we see him no more.

All through the voyage we are passing old historic castles. They are more numerous here than the ruins on the Rhine; and if I were to repeat all the curious stories and stirring legends that the captain and Macintosh tell of them, I should

need the space occupied by that "Life of Confucius," the duty of writing which has been transmitted from one generation of Celestials to another—sons and heirs succeeding in due course to their ambitious fathers' pens. Since leaving Oban we have passed Dunollie Castle, Duart Castle, Loch Nell Castle, the Scandinavian watch-tower of Tirefuar Castle, Stalker Castle on its rocky islet, the isolated ruins of Shuna Castle and Castle-na-Churn, on the Morven Coast; and all the way up to Inverness, grey old ruined towers make pictures and contribute history. Inverlochy Castle, by Fort William, where kings have feasted and soldiers have died; the grand time-honoured towers of Tor Castle, Achnacarry Castle, on Loch Lochy; Invergarry Castle, on Loch Oich; the hoary walls of Urquhart Castle, on Loch Ness; and Inverness Castle, at Inverness. Surely these are enough to satisfy the most ardent craving for old castles?

The Ballachulish Pier is the next stopping-place. The Glencoe hills here threaten us with their awful gloom. This is the point to reach the tragic pass. The arrival of the steamer at these lonely piers causes a little mild excitement. There is an exchange of goods and passengers going short distances; there is the sapient village postman to fetch the letter-bags, generally very limp and empty. Now and again we see a native in kilts; but kilts in Scotland are growing obsolete, and are only worn at fancy balls, and by pallid chieftains from Cockayne (Caledonian Road, N.). A policeman, we notice, always stands idle and listless on these piers; evidently having nobody to "take up," he takes up his position on the quay. Rona looks wiser than Judge Thurlow, following the purser about the boat as the cargo is being discharged, as if to check off his invoice entries and act as general superintendent. We never saw such a matter-of-fact "dour" dog. With her, life is too short for trifling, and she is far too much bound up in the important business of seeing that a box for Ballachulish is not delivered at Ardgour, and that the calf from Appin is duly turned out at Fort William, to be interested in anything or anybody else.

After leaving Ardgour, Rosette gives a cry of delight, for there to the right, behold! through a watery gleam, our first vision of Ben Nevis. Soon we arrive at Fort William. There is time to leisurely saunter through the long street of the little Highland town for a pleasant walk past the Fort, no longer a military station; past the "Long John" distillery, at the foot of one of the spurs of Ben Nevis, to join the *Staffa* again as she lies at Banavie, just about to begin the tour of the Caledonian Canal. The word "canal," as it is commonly understood, conveys no idea of the beautiful water-way that connects the west coast of Scotland, in a direct line of lakes, with the east coast. The Caledonian Canal is a water-thread joining a chain of natural mountain lochs; and throughout its entire length there is not a prosaic passage. Everything is fresh and picturesque; all around is the wildness of the mountains, the sense of space, the spell of solitude, the scent of heather.

Regarded as an engineering enterprise, the Caledonian Canal is one of the most notable works in the country. The cost of constructing it was a million pounds; and the "whole length of the canal, when extended on a map, measures only four miles longer than a straight line drawn from one extremity to the other." Vessels of a thousand tons can navigate the canal; and the locks are each 160 feet long, and 38 feet wide, with an average depth of 18 feet. There are 24 miles of canal, and 38 miles of natural lakes, distributed to Loch Lochy 10 miles, to Loch Oich 4 miles, and to Loch Ness 24 miles.

The next morning brought us a golden-grey day, with mellow tones on wood and water, moor and mountain. In the afternoon we had reached Inverness, quite unable to decide which of the lochs on the Caledonian Canal was the most beautiful. We had spent a pleasant time at Fort Augustus, and had paused to see the Falls of Foyers—the rain had made them finer in effect than even their great fame had given us to anticipate. The *Staffa* lies in the docks at Muirtown (the landing-place for Inverness) all night, and we have a long idle afternoon and evening to explore the beautiful, clean Highland city—its noble river broadening to the shining Moray Firth; its elevated castle, its fine cathedral, and its fair cemetery, on a steep wooded hill-side, that is a picture rather than a place of sepulture. The return journey begins early on the Thursday morning; Oban is reached late the same night; there is an enjoyable experience of a bit of rough sea round the stormy Mull of Kintyre, and we are back at busy Glasgow the next day.

It would be thought that going over the same ground again would become a somewhat monotonous iteration of scene and sensation, but no supposition could really be more remote from the truth. During the return journey we saw the same mountains and glens, the same lakes and rivers, under different atmospheric conditions, and objects that had previously had their back towards us now faced us; peaks and shoulders and ravines that had been hidden in rolling vapours, had now the strong light of a sparkling day, full of mirthful tones, searching out all their wealth of fine colour. Glasgow, anyway, was reached all too soon; and we left the *Staffa* with a pang of personal regret. The parting with Captain M'Kenzie was like bidding farewell to an old and familiar friend. Rosette expressed all our sentiments when she told the captain that she should like to turn the good old boat round, and forthwith go to Inverness and back all over again!

EDWARD BRADBURY.



Music by J. M. BENTLEY, Mus. D.

VOICE.

PIANO.

dim.

The mel - low eve is glid - ing Se -

Tranquillo. *dim.*

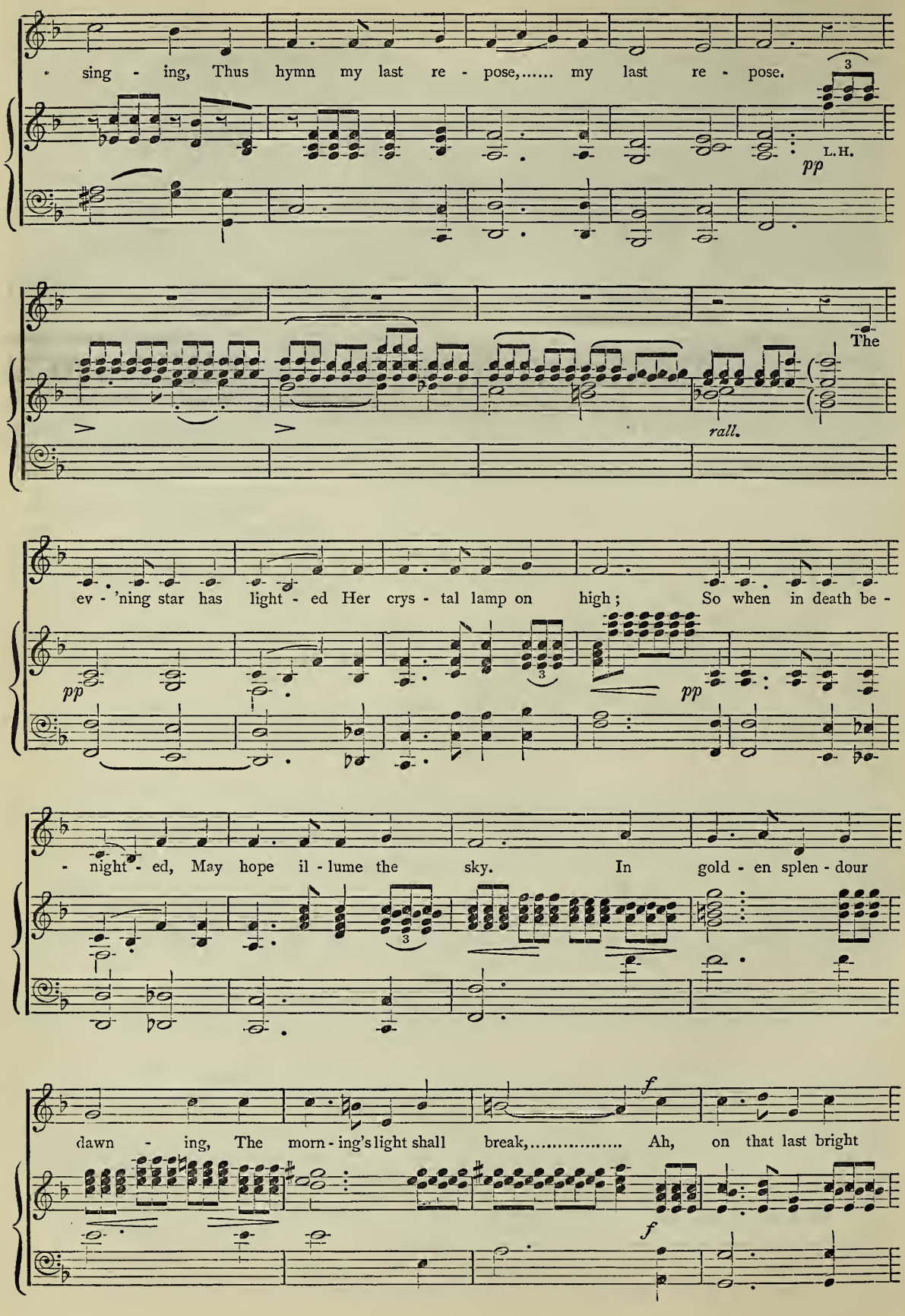
- rene - ly down the west ; So, ev - 'ry care sub - sid - ing, My soul would sink to rest ; The

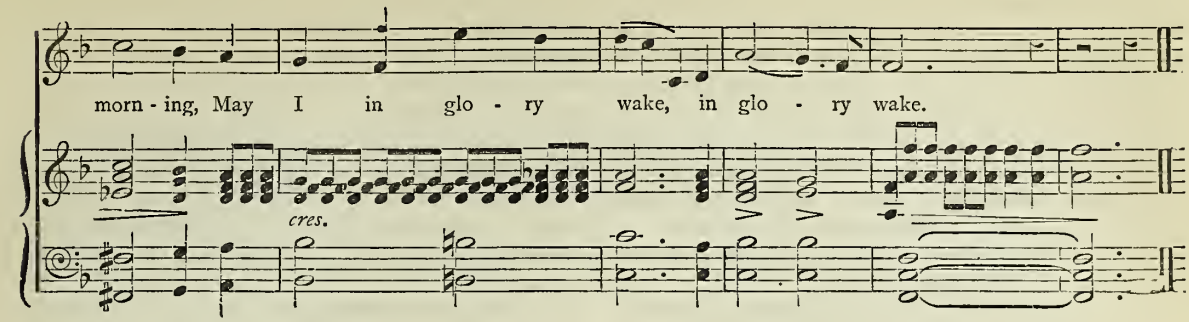
pp *pp* *p*

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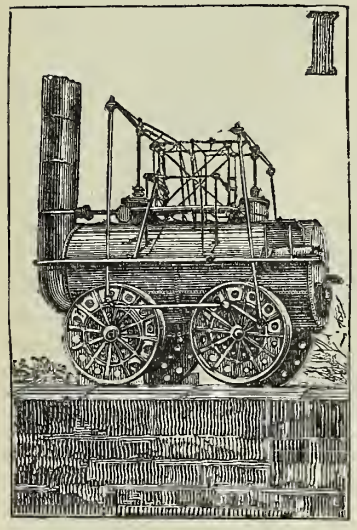
wood - land hum is ring - ing The day - light's gen-tle close ;..... May an - gels, round me

cres.


sing - ing, Thus hymn my last re - pose,..... my last re - pose.
3
L.H.
pp
The
rall.
ev - 'ning star has light - ed Her crys - tal lamp on high; So when in death be -
pp
3
pp
- night - ed, May hope il - lume the sky. In gold - en splen - dour
3
dawn - ing, The morn - ing's light shall break,..... Ah, on that last bright
f
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THE CENTENARY OF STEPHENSON'S BIRTH.



INTERESTING as the celebration of the centenary of the birth of George Stephenson is to the railway traveller all the world over, and to the nation he primarily benefited, it is of especial interest to that part of the north of England which is on and near the banks of the river Tyne. Close to this river he was born, in the collieries near it he "began life," on its banks at Willington he married, and there his son was born; whilst, only a little later, a few miles from the Tyne he perfected his plans for the construction of the locomotive; from thence he walked those long miles to meet the "Father of Railways" at Darlington, and close to the coaly river he planted the engine works that commenced the industry of locomotive erection in the world. And though it may be that some of the great works of Stephenson were done after he left Tyneside, yet it was in the northern district that he learnt his art, and possessing his soul in patience, worked on the pit-heap, in the mine, and on the engines.

There are many memorials of George Stephenson in the Tyneside district—birthplace, residence, factory, and works—and though all around tells the tale of his triumphs, yet a grateful district has added a memorial school, statue, and other reminders of the son it is proud of. Some eight miles from Newcastle, on the 9th of June, 1781, at Wylam-on-Tyne, George Stephenson was born. At that time Wylam was a little colliery village, owing its importance to its nearness to the river and to the coal-seams below it. The great dependence of the coal-consumers of a century ago was on the coal brought over sea, and the Tyne possessed even a greater monopoly of that trade than it now does, though the industry was in miniature and the working in the primitive stage when "gins" were the mode of raising coal, when the "corf" or basket took the place of the cage, when safety-lamps were not, and when the depth of the mine was necessarily limited by the rudeness of the contrivances for working it. Half a mile east of the village—about that distance from the present Wylam station, on the Newcastle and Carlisle branch of the North-Eastern Railway—is the birthplace of the great railway engineer. It is a poor cottage, but a century ago and in a colliery district it would be regarded as far above the average of the homes of the colliers. It is close to the Tyne, the double line of what is now the North Wylam branch of railway passing immediately between. The house is a double cottage, the front presenting the one common door in its two halves, with a small window on each side; and above, three windows over those below, and over the door. An open fence rails off the house from the line; at the eastern end a gate, a notice warning trespassers from the fields, and a straggling tree complete the picture. The lower windows have rude shutters, and to them on the western side there depends a spout to catch the dripping water from the spoutless eaves. The roof is red-tiled, but with frequent patches of darker hue, and with slabs of stone coverning the tops of the grey walls. Enter the door: the worn stairs are in front of you, whilst to right and left are the entrances of the two dwellings. That to the left—the western one—is the birthplace of Stephenson. Its floor is coldly flagged; the beams that protrude from the ceiling are thickened with the whitewash of generations; the huge fireplace has a great baulk of wood across it, and a circular oven of probably later date than the house seems old in shape. Here, then, one hundred years ago George Stephenson was born to Robert Stephenson and his wife Mabel. The father was a fireman, earning twelve shillings weekly, and George was the second son, so that when the coal was worked out at Wylam Colliery and the family

removed to Dewley Burn—not far away—George Stephenson began life as a herd-boy at one shilling weekly, from which position, to be "corfe-bitter" at the colliery, or driver of the horse that turned the "gin," at a wage of four shillings weekly, was a promotion. To Throckley, to Black Callerton, where he became acquainted with Fanny Henderson, his wife, and at twenty-one to Willington Quay, as engineman, Stephenson successively moved, still keeping near the Tyne. Here his wedding and the birth of his son took place; but the cottage has made room for the Stephenson Memorial Schools.

But Killingworth still shows the dwelling of Stephenson. In front of the great northern line from Newcastle to Berwick, the colliery village of Killingworth stands — rows of cottages clustering near the pit comparatively close to the railway, whilst farther off a street straggles up the hill by the church to the older and disused colliery. It was to this little place that the deputations from the promoters of the Liverpool and Manchester Railway went, and here still earlier the father of the primal public railway, Edward Pease, often addressed his "esteemed friend George Stephenson." The house where the son of the engine-tenter lived when he attained a salary of £100 a year is probably that in which Stephenson's saddest and gladdest days were spent, for there his wife died, and there he returned from the triumphal success of the opening of the first public railway: a modest, comfortable dwelling, on which the morning sun shines, and of which the traveller due north may catch a glimpse just before Killingworth station is reached. A sundial—the work of the Stephensons—is in its front; a strip of garden is railed off from the road; and here in this cosy cottage dwelt Stephenson, in the days when his factory at Newcastle was building the first four engines for the Stockton and Darlington Railway, when his safety-lamp was coming into use, and when he was probably thinking over those improvements that the "Rocket" typified.



GEORGE STEPHENSON.

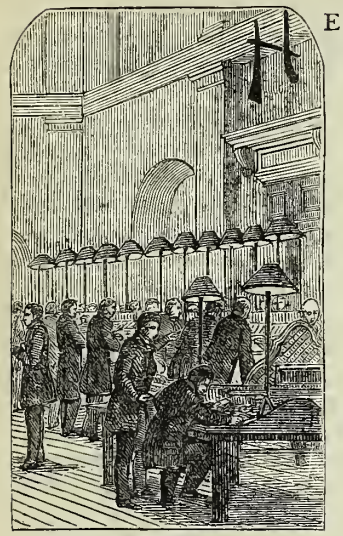
Around the place are mementoes of the great engineer—the colliery he worked at, with the antique and disused gin, with its long wire ropes idly wound round it; the pit he descended after the alarming explosion of 1814—a descent that was the originator of the idea of his safety-lamp; and an old engine, with works displayed, like that shown now at Darlington, with wheels plugged on with wooden plugs—"the germ, the type, the progenitor of the tens of thousands of locomotives that now ply night and day all over the civilised world." This Tyneside district is Stephenson's land. Chesterfield records his later triumphs and enshrines his remains, but Tyneside gives us the early days, hopes, efforts, and successes. Wylam is not only the birthplace of Stephenson, it is one of the spots where early experimental locomotives were made, and the "Puffing Billy" in the Patent Office Museum at Kensington is the proof of the efforts of Hedley; the Killingworth engine of Stephenson and Wood is a vast stride forward; "Locomotion" born in the South Street works of the Stephensons further carries on the improvements, and the "Rocket" gives us from the same works the type of the present means of transit and traffic. Not that alone, but from Bedlington, between Morpeth and Newcastle, the early rails were sent; from West Moor or Wylam many of the earliest engine-drivers sprang — Robert Stephenson (George's brother), Gowland, Murray, and others. And thus Stephenson's land, with its early engines, its first locomotive works — where the old beam-engine George Stephenson built still drives a part of the machinery —and its early associations, is on Tyneside. And having had its commerce many times multiplied, its river deepened till it has become one of the first commercial streams in the world, its great industries generated or developed by Stephenson's work, and its name made famous over the world, Tyneside fittingly recalls the centenary of the birth of its benefactor; and if it gives itself up on the 9th of June to rejoicing, and if marches and melody fill its streets, there is in the sights of Wylam and Killingworth ample cause for the celebration. The monument of Stephenson, placed conspicuously where—

> "The city of his love is swinging
> Its clamorous iron flail,"

is a reminder of the practical benefits that have been conferred on Tyneside in a hundred years, and none can grudge the honours now being paid to the chief cause of them.

HER MAJESTY'S MAILS.

BY THE AUTHOR OF "HER MAJESTY'S MINISTERS," ETC.



HER Majesty's mails delivered throughout the United Kingdom last year more letters, post-cards, and book-packets than there were human beings then in the world. The latest estimate of the population of the globe puts the number at one thousand four hundred and fifty-five millions, nine hundred and twenty-three thousand, five hundred; and the Postmaster-General's last report shows that (not counting newspapers) the correspondence delivered by the British Post-Office within the year reached a grand total of one thousand four hundred and fifty-six millions, four hundred and eighteen thousand, nine hundred. Supposing, therefore, that the postal arrangements of all the countries on the face of the earth had been under the control of the Postmaster-General, he would have had a communication of some sort for every man, woman, and child living, and nearly half a million of them might have had a second letter before all the letter-bags would have been quite empty! Taking together the correspondence of all kinds, including newspapers, the number was actually one thousand five hundred and eighty-six millions, nine hundred and thirty-seven thousand, three hundred; so that if this vast mass of letters, and post-cards, and books, and newspapers had been equally divided among all the inhabitants of Great Britain and Ireland, everybody would have received about forty-six communications during the year.

We have made these calculations for the sake of *helping* our readers to understand what an enormous amount of work is got through in the British Post-Office in one year, but of course it is utterly impossible for any human mind to form an adequate conception of the greatness of the work. It is easy enough to set down the figures and *talk* about the 1,127,997,500 letters, the 114,458,400 post-cards, the 213,963,000 book-packets and circulars, and the 130,518,400 newspapers that passed through the Post-Office within twelve months, but it is quite another matter to endeavour to realise what these figures involve. Let any one just follow in thought the successive steps taken by every letter, from the time it is dropped into the letter-box or pillar-post, to the time it is delivered to the person addressed, and then consider that the same process is gone through as regards every single communication of all these 1,586,000,000, and he will begin to wonder how it can be possible for such a prodigious task to be accomplished as it is in such a wonderfully perfect manner. Clearly, the work could not be done at all without organisation of the most complete kind; and it may be said without fear of contradiction that the British Post-Office is not only the most gigantic establishment in the world, but it is the most elaborately organised. It makes comparatively little use of machinery, and yet it does its work with all the regularity and precision of the most ingeniously constructed machine. It employs (in the postal department) about 35,000 officers of all grades, and every man in the great army has his work to do at a certain hour every day and in a certain way, and he does it. There is rarely any failure: the vast human machine but seldom "goes wrong," so nicely are all its parts adjusted, so systematically are all its manifold operations directed by those who are responsible for its proper working.

It is well known, of course, that the plans upon which the Post-Office is worked are not the product of any one mind. The Post-Office is a growth—a very marvellous growth, too; and many busy brains have been employed in developing the system and bringing it to its present all but faultless state.

Sir Rowland Hill's great idea of a uniform "penny postage," as soon as it was adopted, necessitated great changes in the mode of carrying on the business of the Post-Office, as, instead of 82½ millions, it had 169 millions of letters to deliver during the first year of "penny postage." All these changes were worked out by him to their utmost details with an amount of patience, forethought, and perseverance which few can fully appreciate, but which all must admire.

There were postal reformers, however, before Rowland Hill, who effected improvements in the conveyance of Her Majesty's mails, without which even his great schemes must have proved comparative failures. There was Ralph Allen, immortalised by Pope in the lines—

> "Let humble Allen, with an awkward shame,
> Do good by stealth, and blush to find it fame."

He was the originator of the system of cross-posts between Exeter and Chester, going by way of Bristol, Gloucester, and Worcester, thus connecting the West of England with the Lancashire districts. The Government gave him a lease of the cross-posts for life, at a fixed rental of £6,000 per year. The service was from time to time extended, much to the public advantage, and not a little to Allen's benefit too, he himself estimating the net profits of his contract at £10,000 a year. At his death therefore, in 1764, the Post-Office found cross-posts established in all parts of the country, the whole of which were then brought

under the control of the Postmaster-General. It may be said, in passing, that Allen made generous use of his wealth, as he spent a large part of his income in supporting and encouraging deserving literary men.

More than half a century before the days of "penny postage," a great improvement was effected in the working of the mails by the establishment of what were long known and widely famed as Palmer's mail-coaches. Palmer's scheme was the substitution of mail-coaches for the solitary "mail-cart" or "post-horse" upon which the Department had hitherto relied for the conveyance of letters. The advantages of sending the mails by coaches which would also convey passengers, and would besides be well guarded, were obvious; and Pitt, to whom the scheme was submitted, having sanctioned it, Palmer was forthwith installed as Controller-General of the Mails. The rates of postage were slightly raised, but the number of letters rapidly increased, owing to the greater safety, regularity, and speed which Palmer's mail-coaches insured, and many of the principal towns petitioned the authorities to establish mail-coaches in their districts.

Palmer's plans were so successful that the revenue of the Post-Office rose in twenty years from a quarter of a million to a million and a half; the mails not only travelled more quickly, but were greatly increased in number: 380 towns which had formerly only three deliveries a week, had a daily delivery before the end of the century. In 1836 there were fifty-four four-horse mail-coaches running in England, but although some use had been made of the then existing railways, it was not until the years 1838 and 1839 that Acts of Parliament were passed to provide for the conveyance of the mails by the railway companies. Since that date the Post-Office has used the railway system of the country to the fullest possible extent, but the "missing links" of connections between many towns and villages are still supplied by means of mail-carts and coaches.

The sweeping changes proposed by Sir Rowland (then Mr.) Hill were stoutly resisted by the Post-Office authorities. Colonel Maberley, who had just been appointed Secretary to the Post-Office, not only predicted that if the penny rate were adopted the revenue of the Department would not recover itself within forty or fifty years, but openly declared that the whole scheme was an absurdity and an impossibility. Fortunately the Government of that day was more enterprising than some of its own servants, and had as great a contempt for impossibilities as had the great Pitt when he was told his orders could not be executed because they were impossible. Returning the orders to the messenger, he exclaimed, "Tell your chief that these orders are given by one who treads upon impossibilities." In this spirit the Lords of the Treasury sanctioned the new scheme, and it was immediately brought into operation. For a few months the metropolis alone had the benefit of the reduction, but at the beginning of 1840 a penny postage for the whole of Great Britain and Ireland became an established fact. The immediate result of the changes introduced was an enormous increase in the amount of correspondence, but for some years there was an actual deficit in the revenues of the Post-Office. Sir Rowland Hill anticipated that *ultimately* the net revenue would recover itself within £300,000 of the amount realised by the higher rates which had hitherto prevailed, and that his system would produce a five-fold increase of letters. We have already shown how far his expectations have been surpassed as to the increase in the number of letters; and as to the financial results, it will be seen that even he was not so sanguine as he might have been, when we state that last year the gross revenue of the Post-Office (reckoning postage and money-order commission only) was £6,300,730, as against £2,346,000 in 1839, and that the net revenue (or profit) was £2,497,687, as against £1,660,000 in the last year of the old system. Comparing the two years 1839 and 1879, it appears that the Post-Office delivered in the latter year nearly eighteen times the number of letters, &c., that it delivered forty years ago, and though the postage is less than one-ninth of the average charge then made, the national exchequer is richer by £800,000 per annum.

According to the latest returns, the number of post-offices open in the United Kingdom on the 31st of March, 1880, was 14,212, of which 912 were head offices and 13,300 sub-offices. Besides these, there were 12,541 letter-boxes and pillar-posts in streets, roads, &c., making a total of 26,753 places at which letters may be posted, 2,012 of these places being in London. The staff of the Post-Office (not reckoning those engaged exclusively on telegraph duties) consists of 13,882 postmasters, 3,803 clerks, 16,883 letter-carriers, sorters, &c., 28 mail-guards and porters, besides the secretaries and superior officers, who number 44, and the Postmaster-General. The service of the three kingdoms is managed—of course, under the direction of the Postmaster-General and the Secretary—in their respective capitals, at each of which there is a chief office, with a secretarial and other departmental staffs; and the working arrangements of each office are the same, on a smaller scale, as those adopted at the General Post-Office in London.

Of the several Departments into which the Office is divided, one of the most important, undoubtedly, is the Mail-Office, which deals with all matters relating to the transmission of the mails. There are 617 mails daily between London and other post-towns in England and Wales; 250 towns have two mails from London daily, 162 towns have three, 96 have four, 63 have five, and 20 towns have actually six mails every day. The work of making up and forwarding these mails is done as follows:—After all letters received at the General Post-Office have been placed address uppermost and stamped, they are sorted into twenty great divisions, letters intended for a particular series of roads forming one division; they are then classified according to separate roads or districts, and finally according to different post-towns. The bags are then made up and sealed, and at the appointed time they are conveyed by mail-carts and omnibuses to the railway stations, where they are taken charge of by the officers of the

Travelling Post-Office. The railway mail-coach is literally a post-office on wheels. It is a large commodious vehicle, well lighted and ventilated (well padded, too, in case of accident), and fitted with counters, pigeon-holes, and, indeed, every possible contrivance that can facilitate the business to be done. This business consists of receiving letter-bags from all the towns through which the train passes, emptying them, and dealing with their contents precisely as they would be dealt with at a town post-office—*i.e.*, the letters are sorted and placed in divisions, then in "towns," and finally made up in fresh bags, ready to be given out as the several towns are reached. Mail-trains make few stoppages; when they do, great heaps of bags are quickly turned out of the van, and other heaps taken in; the train moves on again, the work of sorting begins afresh, and new bags are made up. Many of the bags are given out and taken up without stopping the train at all. This is done by means of an ingenious contrivance called the bag-net or pouch apparatus. Letter-bags are suspended from a cross-post fixed close to the line, and these bags are caught up by a rod projected from the van as the train whizzes past, while at the same instant the bags to be left are caught off the van-side by a projecting iron arm fixed in the cross-post, and dropped into a bag-net underneath, from which they are taken by a post-office collector. This wonderful piece of mechanism does its work so well that it is a very rare occurrence indeed for any cross-post to be passed without the bags being safely exchanged exactly as they should be. The Railway Post-Office makes up bags for upwards of fifty towns, and takes up by the day mail and the night mail together more than 500 bags of letters.

Most of the letters for London are sorted in the Travelling Post-Office, and are made up in bags for the different London district offices; and on arrival the bags are forwarded direct to the head office of each district, to be there sorted ready for delivery by the letter-carriers. The business of delivering the morning mail at the General Post-Office commences every morning at six o'clock, at which time upwards of a thousand bags have to be dealt with. This work is done with astonishing expedition, an expert clerk being able to open a bag and check the account of its contents in about a minute and a half. The manner in which the letters are sorted and prepared for delivery, either at the private letter-boxes or by the letter-carriers, is too well known to need description here.

All correspondence for Ireland is sent in bags direct to Holyhead, where they are taken on board a steamer which is fitted up as a floating post-office. A staff of clerks is in readiness to empty the bags and sort the contents during the run across the channel, so that on arrival at Kingstown the bags are ready to be forwarded by rail to all the principal towns. This special Irish service costs the Post-Office £85,900 per annum; the "contract time" for the whole journey of 330 miles (sixty-three miles of which are by water) is eleven hours only, a penalty of 34s. per minute being incurred if this time is exceeded. A service of a novel kind has recently been established on the Clyde by placing a post-office on board the *Columba* steam-vessel, which plies between Greenock and Ardrishaig. In this vessel all the ordinary work of a post-office, excepting money order business, is performed; even messages for transmission by telegraph are received on board and despatched at each place at which the vessel calls.

J. T. G.

WHAT TO WEAR.

CHIT-CHAT ON DRESS. BY OUR PARIS CORRESPONDENT.

THERE is quite a revolution in dress-making. The waists of bodices are short—certainly in the front—and the change is not a becoming one, for there is generally a wide waist-band formed of cross-cut folds, which thickens the waist. Below the waist several of the new skirts are gathered to a depth of half a yard, and then comes a scarf tunic; indeed, many have the entire front gathered, and it is scarcely possible to introduce too many gatherings in any dress to be quite in the fashion. These gaugings appear on the trimmings, on the sleeves, and also on the collar-piece now so fashionable. Frillings are going out, and box-plaitings have taken their place where plaitings are worn at all; but box-plaited and kilt-plaited flounces or bouillonnés are newer. These have the upper edge plaited, the lower one gathered; and in stripes great pains are taken to prevent the colour being hidden, and to show the stripes with regularity. Unfortunately these puffs or bouillonné flounces soon get out of order.

Short skirts are *de rigueur* for daily wear, but long trains, well supported by a balayeuse, for evening and full dress. Much gold braid and gold embroidery are applied to dresses; but steel is the particular fashion, and steel and jet, and steel passementerie alone. Steel run net, steel fringes, and steel laces find their place on the best dresses; and some of the richest evening dresses have black net over-skirts embroidered with steel bugles. Large upstanding ruffs, worked in silk, steel, or gold, are also worn and supported by wire—these are mostly for dinner dresses.

Fewer seams are introduced on the bodices; and for young figures many are cut on the cross so that there is no seam on the shoulders. The sleeves are tight, and the bodices themselves much trimmed about the throat, or in draperies about the bodice. Long coat bodices are by no means gone out, and generally when the bodice is short in front there is a deep basque at the back.

Black will be fashionable all the summer; but the flounces, plaitings, puffings, and bows are lined with



a colour, which peeps out here and there and relieves the sombreness. Occasionally the coloured flounce is gathered, and falls over the black at the edge of the skirt, and then the colour is more openly introduced, and is worn alike on bodices and on the front of the skirt or tunic, and most of the short skirts are so fully draped and trimmed that they seem twice the width they used to be—in reality they are narrower.

Simple walking dresses of neutral tint are relieved by liberal trimmings of the Algérienne and Bayadere striped scarfs set on at angles, so that the stripes are seen in great diversity, and give a touch of colour.

Cashmere dresses trimmed with satin are still worn, and large sashes appear on them and on other dresses. Chessboard checks of silk and satin, mixed in one tone and a contrast, are being universally worn.

There is a great deal of fringe and tagged cord and heavy passementerie used; but in buttons there are plenty of novelties. Bone, tortoiseshell, ivory, and mother-of-pearl are carved, inlaid, and enamelled. The repoussé metal buttons are works of art, and steel buttons coloured to match the dress are new this season. Jet buttons have been brought out, with steel studs, and all Japanese designs have been eagerly adapted.

Those who make dresses at home will be glad to hear they can have a new kind of dress-preserver which is scentless, and that a substitute for whalebone has been brought out, made the required length, and set in black silk casing, ready to tack at once on the seams.

Children's clothes now are most quaint and pretty, and the variety in bonnets and hats is quite bewildering. They are generally revivals of old shapes, such



as the Foundling, resembling the old Quaker bonnet, made in satin and foulard of delicate tones; the fronts gathered, the crowns following the original model; a bow at the side, a ruff of lace placed in front of the crown. Another shape has a stiff, plain coloured front, in such colours as myrtle-green, lined with primrose, with no lace to soften either outside or inside, but a bow of satin of the new yellow shade inside the front. And as all the children's bonnets are very large, soft striped plush is used for some of these huge stiff bonnets, while some are tucked all over and some honey-combed. Soft plush hoods and large, stiff, coarse straw hats are the mode for children. Wreaths, large and ambitious, are wound round some of the crowns of the hats made of lace and ribbon. The open-work straws, lined with a colour, have been prettily adapted to children's wear; so have the leather-colour and other tinted straws. On all there can scarcely be too many flowers upon and under the brims, and in front of the crowns. Steel lace and steel net are worn.

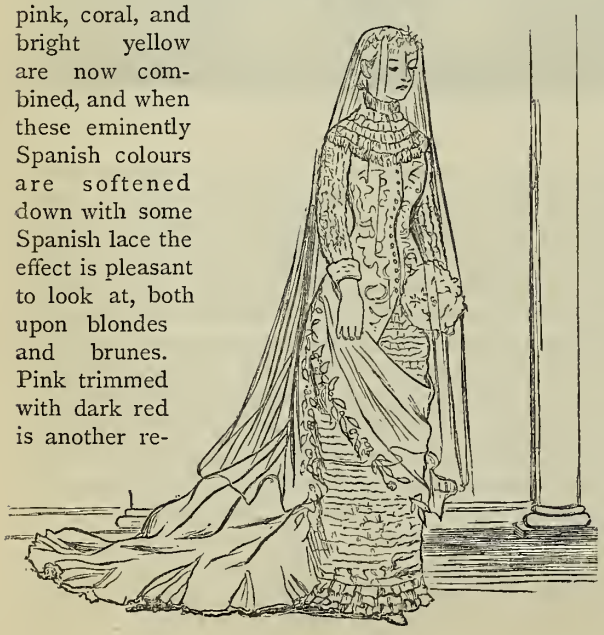
Straw bands and straw collars and tunics are used for frocks, but they are stiff and ugly; and another novelty is to have all the seams laced down. Algerian stripes are used for trimmings on many neutral-tinted dresses. A grand novelty are frocks honey-combed all over. For every-day wear many of the little frocks are made of Toile Religieuse, or Nun's Cloth, gaugings and gatherings being liberally used. The Princess style still prevails, and box-plaitings are superseding kiltings. Mother Hubbard cloaks for children are very quaint and pretty, and so are the cloaks with coachmen's capes. I counted nine on one. A new Pilgrim ulster has a knotted girdle round the waist, and is quaint-looking as well as useful wear.

In millinery the principal novelties are that the bonnets are much larger—modified revivals of fifty years ago. Fine straw is fashionable, and the brims are always edged with a piping, sometimes of chenille, sometimes of straw; but steel lace and steel net are novelties, and tinsel steel has been even applied to flowers. Ostrich feathers, shaded to match every tint in the bonnet, are also used. Honey-combed gatherings cover many of the bonnets, especially the crowns, and close-set bias bands of silk compose occasionally the entire front, and at a distance look like straw. Beetles, bows of lace, and flowers are blended together. Sombre tints have given place to bright ones, and masses of flowers weigh down most of the newest bonnets. Spanish lace is applied to millinery as well as to everything else, and Spanish mantillas are worn. Hats, like the bonnets, are larger, but are distinct, and not at all likely to be mistaken the one for the other.

The garden fan is a novelty. It is completely covered with a design of foliage, very exquisitely drawn; and if we have a hot summer, which is possible, this will be the fan that will be generally used for out-of-doors, at fêtes, &c. A useful opera cloak is of the Dolman shape, made in brocade, and bordered with white fur.

There are several cuts illustrating the accepted fashions for the season, and a reference to them will bring out their salient points more clearly than a mere verbal description.

First, the group in evening attire. The principal novel feature in the make of these dresses is the sleeve, for we have once more bidden adieu to the monotonous coat-sleeve, and have broken out into puffings, and gatherings, and slashes, and other picturesque items on our arms. Indeed, the leg of mutton sleeve is revived in a moderate form; but whatever vagary the sleeve assumes, it is set in very high on the shoulder, and in many cases stands upward above it. Another novel point is in the colouring, for pink, coral, and bright yellow are now combined, and when these eminently Spanish colours are softened down with some Spanish lace the effect is pleasant to look at, both upon blondes and brunes. Pink trimmed with dark red is another recent success in colour, strange though the contrast may seem. Nun's Veiling (or Nun's Cloth, as it is sometimes called)—a soft clinging fabric; Madras muslin, which re-appears this season much improved in colouring and texture, and is a favourite material over cotton-backed satin; Pompadour sateens, fine Umritzur cashmeres, are all used by young people for evening dresses, and very suitable they prove. Satins and brocades are reserved for more matronly wearers, whose purses can better bear the outgoings for these more costly materials. The sketches here given can be copied in either the former or latter class of fabrics; if flowers are used they should be mounted on flexible stems, and have the same crushed effect as in millinery; and crushing is not confined to roses, but it extends to carnations, chrysanthemums—indeed, to all many-petalled blooms. What with silver lace, steel lace, pearl lace, coloured Spanish lace, Bayadere scarfs, shaded satins, and gold embroideries, there is no lack of beautiful trimmings for evening and fête dresses this season.





Before turning to the second group, let us discuss the outlined figures—one a bride, the other a traveller in the new dust-cloak. *Place à la mariée* in her cream satin and broché gauze robe, much ornamented with pearls. The fan-shaped plaitings inserted at regular intervals round the edge of the train are a graceful addition, and the much-gauged tablier testifies to the presence of gaugings in every variety of toilette. The conventional orange blossoms serve as a fringe to the scarf that crosses the tablier. The design on the brocade of the bodice is outlined with the tiniest of seed pearls, and the bouillonné net-yoke and sleeves are also ornamented with pearls—which, by the way, should be the Roman beads with their rich cream effect, always providing artificial pearls are worn. The dust-cloak on the other figure is of thin alpaca, in colour like bège. The back and neck are gathered, so are the sleeves. The bows may be of the same shade as the cloak, or dark crimson. The strings to the bonnet are shaded gauze.

The second group shows some figures in walking attire, and the last lady in it wears a Mother Hubbard cape or mantelet, a modified poke bonnet, and an embroidered foulard costume. The straw of which the bonnet is made is Tuscan lace (as fine as though thread and not straw had been used), and the flowers are crushed-looking and have no green leaves—by the way, the flowers this season all look as though they were crushed, and just falling to pieces

through the fatigue of blooming. The ribbon that trims our model bonnet is shaded satin, for *ombré* effects are everywhere in our toilettes. The skirt opens on the left side to disclose some bouillonné flounces, and the tablier is embroidered; for the foulards and Satins Merveilleux are now embroidered in the style known in Paris as "Broderie Anglaise," which resembles Scotch work. Silk of various colours of the pattern in the foulard are used for overcasting the eyelets that go to form the design. The most ingenious effects are produced in these embroideries by drying them after dyeing. They are hung so that the colour runs off, and they shade thus from dark to light; the rage for *ombré* extending even to embroidery. The material of the mantelet may be either Satin Surah (which also goes by the name of Satin Merveilleux), cashmere, or diagonal, but it should be lined with coloured silk, and trimmed with chenille and jet fringe; the loops which terminate the ends are satin. The arrangement of these long loops should be marked; they are in clusters held at the top by a small traverse or strap.

The third figure wears a Directoire coat of black broché satin, embroidered with steel on the collar, fronts, and upturned cuff of the sleeve. The waistcoat (also embroidered) is fastened with steel buttons; and two large steel buttons mark the waist-line at the back. The dress is satin foulard, the tablier ornamented with embroidery, and the tunic caught back, curtain-fashion, with cords and tassels. The lace used for both jabot and sleeve ruffles is the new D'Aurillac. The hat is open lace-straw with shaded feathers, fastened down with a steel aigrette. The gloves are *café au lait* Suèdes, fashionable but expensive wear, for they soil easily and clean unsatisfactorily.

The young matron to whom the last maiden is speaking, wears one of the mantles which French women affect this season, and which the English discard for the more close-fitting coat, and the æsthetics for more quaint flowing garments. The mantle in question is satin, gathered in the back, and trimmed with appliqués of bugled jet and deep bugled lace; bugles being richer and handsomer than beads. This gathered back is sometimes replaced by bugled net. The dress is Umritzur cashmere of terra-cotta shade, trimmed with shaded satin to match. These cashmeres are soft, clinging, and artistic, and are consequently in great demand. The trimmings of the hat recall those of the dress. It should be mentioned that the lace on the mantle and forming the ruffle round the throat is black Spanish, a lace for which there is quite a furore at present.

The young girl with a toque on her head, a round pelerine drawn in on the chest under a cluster of loops, has her costume made entirely of delicate sateen, as fine and glossy as satin. The front or tablier is prettily trimmed with the muslin embroidery known in Paris as "church lace," and "Irish point," and which is now produced in many delicate colourings, and, moreover, shaded. The toque is of the same fabric as the dress. The sateens are exquisite this season.

THE GATHERER.

A New Bronze.

Experiments made by Professor R. H. Thurston in the Laboratory of the Stevens Institute of Technology, New York, have resulted in the discovery of a new bronze or alloy of copper, tin, and zinc, of great strength, considerable hardness, and capability of being forged. It consists of 55 parts of copper, 43 of zinc, and 2 of tin. The colour is good, the texture close, and the surface takes a high polish. For purposes demanding great toughness allied to strength, Professor Thurston, however, finds that less tin is desirable, and he gives the proportions, copper 55 parts, tin 0·5 parts, and zinc 44·5 parts, as affording the best results. A rod of this alloy has a tensile strength of about 69,000 lbs. per square inch of area across. Another alloy of 58·22 parts of copper, 2·3 parts of tin, and 39·48 parts of zinc was found to make excellent bolts, and could be forged at a low red heat. These new bronzes are well worthy the attention of our engineers and mechanicians.

A Mountain Lift.

A novelty in mountain transport is about to be introduced at the town of Cauterets in the Pyrenees. This place is much frequented during the summer season by visitors, who go there to get the benefit of the sulphurous baths for which it is justly celebrated. Some of the thermal springs are situated on the side of one of the mountains at a height of 125 mètres, or 400 feet, above the town. To bring the mineral water in pipes to the town would be to allow it to cool very considerably from its normal temperature of 39° Centigrade, and hence it is found advisable for the bathers to resort to the springs themselves. At present they are transported in sedan chairs; but M. Edoux, a French engineer, has conceived the idea of erecting a hydraulic lift in stages, to overcome the vertical height, and level tramways between, to traverse the horizontal distance. His plan is to erect five towers, each containing a hydraulic elevator capable of lifting a carriage full of passengers. The motive-power is supplied by a waterfall on the hillside, and the car runs along the level tracks by its own gravity from one tower to the next. Brakes to prevent dangerous excess of speed are added to the car.

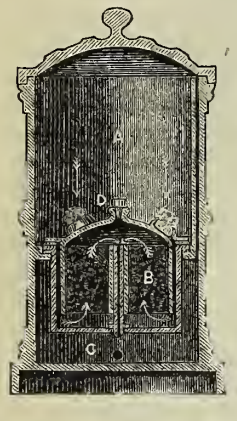
Vanilla Sugar.

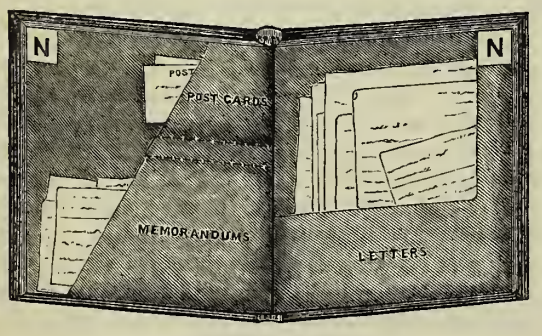
Vanilla is an exquisite aroma; but the high price of the natural bean is a great drawback to its general use in cookery. An economical substitute for it has,

however, been introduced of late in the form of vanilla-scented sugar, which, when added in a small quantity to puddings, creams, custards, jellies, &c., is said to give them a rich and fragrant savour of vanilla.

A New Filter.

The deposit of silt on the carbon of the ordinary carbon filter is a source of trouble, and it is satisfactory to find it obviated in the filter by the recently introduced Silicated Carbon Filter. The interior of this useful appliance is illustrated in the figure. The water is poured into the chamber A at the top; but it does not percolate downwards through the carbon as in the older forms, and leave its impurities on the upper surface. It passes down, as shown by the arrows, through two side inlets, plugged with sponge or asbestos, then *ascends* through the carbon B, and overflows into the bottom chamber C, from whence it is drawn off by a tap. To clean it, the small india-rubber plug D, at the top of the cell enclosing the carbon, is withdrawn, and a current of water sent backward through the carbon. This cell can also be bodily removed from the filter, and transformed into a pocket filter by putting the plug into the bottom of the middle or outlet passage, so as to stop it up, and fixing an india-rubber pipe with mouthpiece on the nipple at D. When the cell is thus arranged it can be lowered into impure water, and the filtered supply sucked through the tube. This is an advantage which should prove useful to families visiting the seaside, and objecting to take with them the entire apparatus.



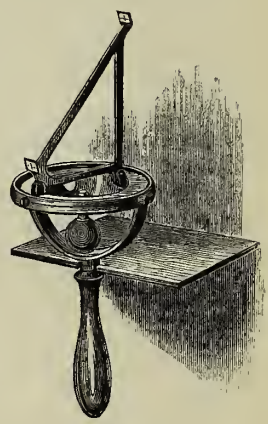


A Letter Album.

This letter-file, or rather album, is designed to sort, bind, and index letters, cards, or other documents, either alphabetically or in the order of their date, while leaving each paper readily accessible without disturbing the rest. No springs or screws are employed, and the papers are neither perforated nor endorsed. The album consists of a folio, like an ordinary leaf or blotting-paper holder, but having four strings at the joint. Through these strings are slipped a series of double leaves, bearing in each corner a letter of the alphabet, as shown in the woodcut, or day of the month, and on each right-hand page a partial pocket, like the letter L in reverse, which is intended to hold letter-sized papers. On the left-hand page is a diagonal pocket, divided into two compartments, the upper one for post-cards, and the lower for memorandum forms. Each set of pockets is intended to last for a month, or longer, according to the amount of correspondence; and when full it is withdrawn from the strings, and stored up for future reference, and its place supplied by a new set. When the alphabetical file is used the papers should be slipped into the file one behind the other in order of date.

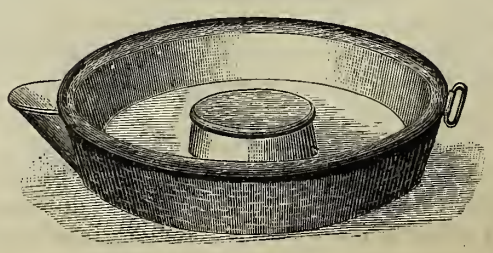
The Hypsometer.

A useful little instrument, called the "hypsometer," for measuring the vertical height of walls, timber, trees, and spouting, and therefore valuable to surveyors, builders, and artisans, has just been introduced. It obviates the necessity of getting to the summit of the object to be measured and dropping a tape line to the bottom. As will be seen from the engraving, it is a trigonometrical instrument, but it is quite free from adjusting screws, degrees of arc, or the need of calculation, and hence it can be used by all. The suspended ball below the horizontal circle is a weight for automatically keeping the base of the instrument horizontal. To find the height of any object, the hypsometer is simply held by the handle, and the eye is applied to the inclined sight-vane shown, while the observer advances or recedes until the point whose height above the ground is wanted is seen to be intersected by the cross-hairs in both sight-vanes. The distance from his position to the base of the object, added to the height of his eye above the ground, as measured by a tape line, gives the altitude of the point.



A Pedestal Sponge-Bath.

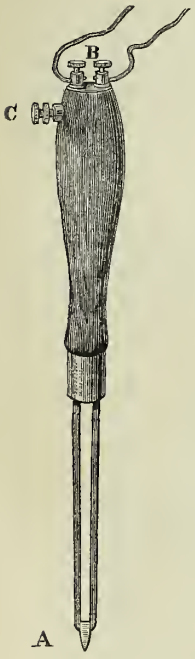
The use of the sponge-bath is now so common that any improvement in it will be welcome to many. As



they are ordinarily made, the bather has to stand with his feet immersed in the cold water during the sponging operation; and for some persons with defective circulation the dry pedestal or stand for the feet, arising from the middle of the basin, as shown in the figure, will recommend itself. The platform is about a foot in diameter, and covered with cork, which is comfortable for the feet, and in cold weather may be warmed by pouring on it a little hot water.

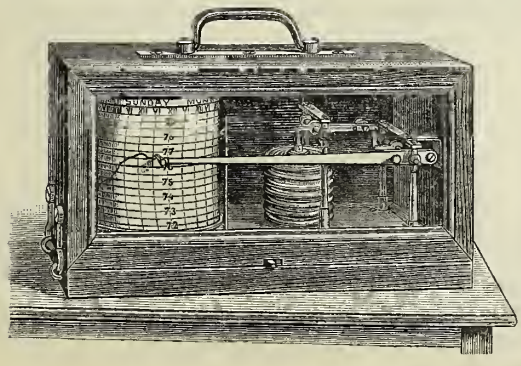
An Electrical Soldering-Iron.

The annexed figure illustrates a new soldering-iron, heated by the electric current, and capable of melting all kinds of solder, from those used for jointing gold and silver, which have hitherto required the fervent heat of a blowpipe to melt them, to the more fusible alloys used in making tin utensils. The "iron" is formed of two strong metal stems, running through the handle, and connected at the point by a tip of platinum, A, or other refractory metal. The electric current is brought by means of wires to the binding-screws, B, at the end of the haft, and as these are in connection with the stems, it circulates through the metal tip, and heats it up to redness. The flow of the current is, however, regulated by a spring-button, C, in the side of the handle, which, on being pressed in by the hand, bridges over a gap in the left-hand stem within the handle, and thus completes the circuit. When the button is allowed to spring back, the circuit is interrupted, and the current no longer heats the soldering-tip. When electricity is "laid on" to work-shops and dwelling-houses like gas or water, this tool, which is the invention of an American, will probably be serviceable; but at present it can only have a very restricted application.



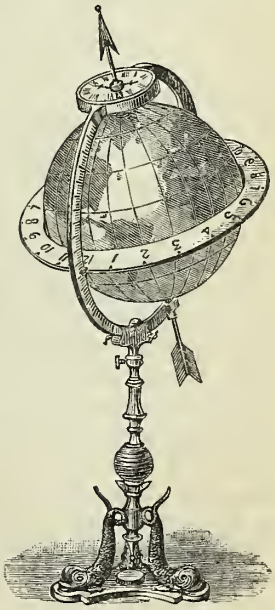
A Recording Barometer.

A very neat and portable barometer for recording the pressure of the atmosphere has been devised by M. Richard, of Paris. As shown in the engraving, it consists of a wooden case fronted with glass, and containing within it a small expansive aneroid chamber, something like the bellows of a concertina. The top of this chamber is connected by a series of levers to a multiplying index, which carries a fine pencil or marker at its extremity. A band of paper wrapped round a revolving cylinder is marked with the hours of the day, and cross-lines for the degrees of the barometer scale. The aneroid chamber, being sensitive to the pressure of the atmosphere, contracts or expands according as the latter is greater or less, and thereby actuates the index, which moves up and down across the cylinder of paper. The paper is turned by clock-work, and the pencil consequently leaves a linear trace upon its surface. The same device has also been applied by M. Richard to the thermometer and the hygrometer. For amateurs in meteorology the apparatus appears to be well adapted, and its price is small.



A Time Globe.

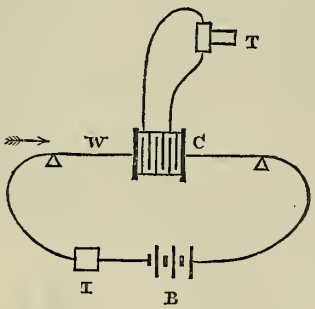
Juvet's "Time Globe," which we illustrate herewith, is a great improvement on the ordinary still globe hitherto constructed, and cannot fail to prove a boon to teachers, as well as an instructive acquisition to the library or the office. It is really a miniature earth, turning once round its axis in twenty-four hours, by means of clock-work concealed in the interior of the globe. The motion is indicated by a clock-face with hands under the glass, and the works are wound up every four days by turning the feathered end of the arrow which serves for the terrestrial axis. The equator is surrounded by a zone, marked in hours and minutes, so that the time at any place on the earth's surface can be told at once by travelling along the meridian of the place until this equatorial circle is reached. One-half of the zone is darkened in different shades, to show at a glance which parts of the world have night or daylight, sunrise or sunset. The map itself contains a great deal of useful geographic information, and altogether the instrument will be a capital help to students.



Electrical Torsion.

The most recent discovery in electrical science is the existence of what we may call electrical torsion, a fact which throws a new light on the passage of the cur-

rent through a wire, and on the essential nature of electricity, about which absolutely nothing certain was hitherto known. Professor D. E. Hughes, the distinguished inventor of the microphone, has proved that when a current is sent through an iron wire the molecules of the wire are actually twisted, and the twist for a positive current is opposite to that for a negative current. If we suppose the current from the zinc pole of the battery, B, sent through the iron wire W, in the direction of the arrow, the molecules will be twisted from right to left across the wire ; the observer being supposed to look in the direction of the current. Professor Hughes discovered this important result by means of a telephone, T, connected in the circuit of a



hollow coil, C, surrounding the middle of the wire. The current entering the wire was regularly interrupted by a clockwork interrupter, I, and the corresponding current *induced* in the coil made itself heard in the telephone. But he had previously found that the wire could induce no current in the coil unless it was twisted, and thus it followed that the passage of the current twists the wire. Moreover, if a twist in the opposite direction was given to the wire by hand, the torsion of the current was neutralised, and the telephone was dumb.

A practical outcome of his experiments is a new and simple telephone receiver, which consists simply of the taut iron wire, W, with the current passing through it. When the battery is sufficiently powerful, the interrupted current causes the wire to resound with a distinct musical tone, of a pitch and timbre depending on the nature of the wire and the number of interruptions per second ; and if a good microphone is substituted for the interrupter, the wire gives out articulate speech.

The Mékarski Air-Locomotive.

Air-engines are likely to replace horses for drawing tramway-cars. They are free from the noise, ash, and smoke of a steam-locomotive, and can be readily stopped by the brakes. One of these, the Mékarski motor, was successfully tried on the Wantage tramway for three months last autumn, and has been working the Nantes lines for two years. The locomotive, which weighs 7½ tons, is fitted with a strong steel reservoir for the compressed air, which is supplied to it before starting on its journey. The air is in the first place condensed by stationary engines at the termini of the tramway. On starting the engine, the air passes through a reservoir of hot water and steam to the regulator, and thence to the working cylinders. The hot water raises the temperature of the air, thus increasing its volume and economising the store, while it further prevents the formation of ice in the exhaust passages of the cylinders as the spent air escapes, and in escaping cools. The moisture by which the air becomes charged also assists in the lubrication of the engine. The working pressure of the air in the cylinder is about 90 lbs. on the square inch, but this can be reduced or increased at will by the regulator. The engine is either attached to the tram-car or kept separate. While upon this topic, we may also mention that Col. Beaumont's air-engine, which is now working the Leeds tramways, was recently tried on the Metropolitan Underground Railway, and found to answer well. The question of cost is, however, here a drawback, which does not occur in the case of tramways, for these can be worked by air at a cheaper rate than by horse-power.

A New Tram-Rail.

In the ordinary tramway-rail, there is a guiding rut in which the flange of the car-wheel runs ; but this is often an inconvenience to other vehicles, especially

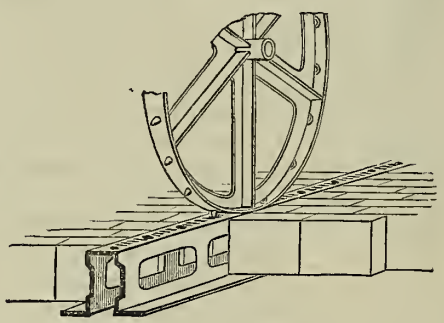


FIG. 1.

light spring-carts, for when the wheels get into the rut, it is difficult to get them out again without a shock disturbing alike to persons and to parcels in the cart. Mr. Edge, of Birmingham, has therefore invented the kind of rail shown in Fig. 1, which is free from the objection attaching to the rut-rail. Mr. Edge's rail is pierced at short and equal intervals with round holes, into which work conical teeth set round the tire of the tram-wheel, and between these holes the rail is furrowed crosswise so as to roughen it and prevent the wheel from slipping. Fig. 2 represents the form



FIG. 2.

taken by a branch rail at the "points." This contrivance has already been working with every success at the town of Brunswick in Germany for more than a year ; and it is, we believe, about to be introduced on the Birmingham to Aston tramway now being constructed.

Mr. Grubb's New Telescope.

The largest refracting telescope ever made has been lately manufactured in Dublin for the Austrian Government. Lord Rosse's gigantic reflecting telescope is the largest of its class, and very large instruments are in existence at Newcastle, at Melbourne, and at Washington, but Mr. Grubb's achievement has surpassed all former efforts. The history of this unprecedented tube would occupy more space than we can here afford, but we may sketch the circumstances under which it has been constructed. The Austrian Government appointed a commission to ascertain and report upon the work entrusted by that State to Mr. Grubb after a thorough investigation. The length of the tube is 33 feet 6 inches and the aperture is 27 inches in diameter. The great and almost insurmountable difficulty consisted in obtaining glass sufficiently pure for such an instrument. The discs were furnished by M. Fiet of Paris, but great delay and expense were caused, for it was believed almost impossible to procure discs of such a size free from defect. Three years after the mounting was completed, the discs remained to be supplied. But at last success crowned the work, and the great telescope is an accomplished fact. The instrument is fitted with all modern improvements, and with all the latest appliances that Mr. Grubb's ingenuity could suggest. The entire moving part weighs about seven tons, and yet the mechanism is so arranged that a child can turn the ponderous instrument. By a peculiar system of equipoise, Mr. Grubb has overcome the great difficulty of motion without reducing the diameter of the axes, which in this instrument are of perfect stability and of great solidity. In the reading of the circles also a very considerable improvement is observable, for by means of a handy reader-telescope—a dwarf beside the giant—all the circles can be read and the spectator need not move from his seat. Without going farther into the technicalities of the instrument, we may mention the results obtainable. It is assumed that refracting telescopes should bear a magnifying power of 100 for every inch in diameter they possess. Therefore this great telescope should render an object 2,700 miles away as distinct as if it were only one mile distant. The moon was viewed through the glass, and its mountains, valleys, and volcanoes—the so-called railway cutting, and the wonderful lunal rills with the craters standing out in relief—were all distinctly visible. We may now assume that the limit of telescopes has been reached, for the great difficulty of supplying discs even one inch more than those hitherto manufactured has scarcely now been overcome. Four anxious years were occupied in preparing suitable glasses, and the finished object-glass is worth £4,000. The massive settings of the frame will astonish many visitors. This frame is of cast iron and there are good-sized rooms at its base ; in one of the chambers is the clock-work movement to turn the instrument in the path of the heavenly bodies as they revolve. This, the greatest and latest achievement of its talented constructor, is really a triumph of art and skilled mechanism.

Anatomical Illumination.

The "polyscope" of M. Trouvé has been applied with marked success to anatomical demonstration by a French professor. This little instrument is really a small electric light of the incandescent sort, enclosed in a tiny glass ball or globe. The light is furnished by a fine platinum wire, rendered white-hot by the passage of an electric current through its mass, and the current is conveyed to this electric wick by slender copper wires insulated with gutta-percha. The physiologist above mentioned causes different kinds of fish and other semi-lucent animals to swallow the ball of the polyscope, and when the current is sent through the wire, the brilliance of the light is such that every internal organ, vein, and muscle is illuminated from within, and can be studied by the student. Like his electric probe, which we recently referred to, the polyscope of M. Trouvé is destined to prove of value in surgery and medicine, especially now that a more brilliant light can be obtained from a thread of carbon instead of a wire of platinum.

An Electrical Thermometer.

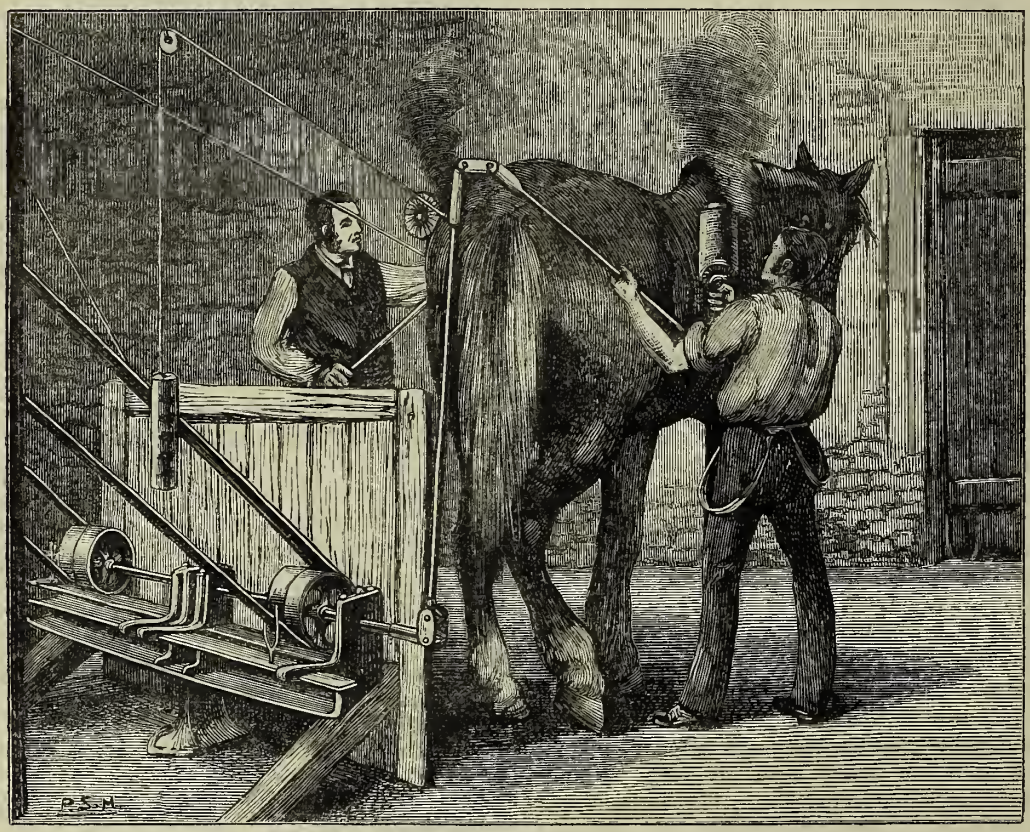
It is sometimes convenient to get the readings of a thermometer indicated at a place some distance from the instrument, and electricity is obviously the best means of effecting this. The electrical thermometer under our notice consists of the ordinary mercurial tube with a series of platinum contact wires fused into the stem at equal intervals of 3° Fahr., for any range of the scale it is required to obtain observations on. The bore of the tube above the mercury column and a bulb formed on the top of the stem are partly filled with glycerine. A platinum wire, fused into the mercury bulb, is connected to one pole of a voltaic battery, the other pole of which is connected to the "earth." If now we suppose a wire in circuit with an electric bell and "earth" to be rapidly drawn across the contact wires fused into the stem, the bell will ring if the circuit be completed by the mercury column. If, however, the column has not risen sufficiently high for this, the bell will remain silent. This passage of the bell-wire over the series of platinum contacts is effected by means of a dial and a revolving arm. The contacts are connected to a row of studs round the rim of the dial, and the bell to the arm, which revolves by clockwork. As soon as an observation is required, the arm is started, and passing rapidly in succession over the studs, the bell indicates what stud the mercury column has failed to reach, and hence the temperature.

Tricycles for Telegraph Messengers.

Velocipedes are now being used in several parts of England for enabling postmen to convey letters with greater expedition, and the authorities of New South Wales are about to provide their telegraph messengers with tricycles instead of ponies. It is expected that this reform will effect a considerable saving to the colony for forage and saddlery per annum. The idea is a good one, and might well be adopted by our telegraph service in rural and suburban districts.

A Mechanical Groom.

The grooming of a large stud of horses employed in hunting, or for omnibus and tramway hauling, may be greatly facilitated by the use of the American horse-brusher shown in the engraving. As will be seen, it is simply an adaptation of the rotary brush which has been introduced into most of our hair-cutting rooms. The power is derived from a man, or perhaps a small gas-engine, and is communicated to the two brushes by means of endless belts working on a shaft, and jointed levers gearing into each other at the ends. When it is desired to stop the motion, the belts are displaced from the pulleys of the shaft. The weights of the transmitting levers are balanced by counter-poises hung over pulleys fixed to the roof, in order not to fatigue the grooms, who can give their entire care to the proper application of the brushes. The brush turns with an average speed of from 500 to 600 turns per minute, and so searching and vigorous is its action that a perfect cloud of dust is raised from the horse's skin.



Dishes from Shavings.

Plates and salvers are made from wood shavings by the following process, invented by Herr Heilmann. Flat shavings are steeped in a weak solution of gelatine for twenty-four hours, and then dried and trimmed. Sheets of the size of the dish to be produced are cut out of cardboard or stout paper, and moistened with a liquid formed of a feeble solution of gelatine and fusible glass. They are then shaped by pressure in a warm mould; and, after being dried, are covered on both faces with a glue composed of five parts of Russian gelatine and one part of turpentine. The prepared shavings are then applied over the card-board, and the whole pressed firm. The shaving acts as a veneer, and besides adding to the beauty of the platter, it increases its cleanliness.

A Reporting Machine.

A machine for reporting the debates in shorthand has just been introduced into the Italian Senate, where it is manipulated by young ladies. It is a small instrument, about one and a half feet long by one foot wide, and it is played with keys like a piano. The number of elementary signs is only six, but by combinations of these a total of seventy-four phonetic letters is obtained. The signs are neatly printed on a tape of paper running under the types, and a speed of 200 words per minute, which is rather more than the most rapid speaker can utter, is attainable. The characters can be read after a few months' practice, but it requires about a year to train the operator to report well. Persons of a quick hearing are best adapted for the work, and blind people are therefore eligible. The "stenograph" will record any language in the world, and it does not even require that the operator should understand what the speaker says, provided he does not articulate too fast.

THE PROBATION OF DOROTHY TRAVERS.

By the Author of "In a Minor Key."

CHAPTER THE TWENTY-FIFTH.

"TO BE, OR NOT TO BE?"



LADY Travers sat by her boudoir fire, warming her feet and reading the newspaper — a well-merited rest, after writing ten letters, in most of which she had had to weigh her words and skilfully turn her sentences. Her head was full of one idea just at present. Rose was to marry Lord Marsland, and in order to bring this about, the two must meet again. Ferdie's untimely death had nipped the budding attachment in its earliest stages; but Ferdie had been dead three whole weeks now, and it was time to think of the living. Six out of those ten letters had been sent out as little messengers, in order to bring about this desired result, and Lady Travers complacently conned her plans between the lines of her paper, and in her mind's eye beheld Rose mistress of Wayvern Abbey, mistress of the house in Belgrave Square, and, above all, mistress of her husband.

"For he must be managed," added her ladyship, aloud, "and Rose has much of my strength of will."

The Marsland family traced its descent back to the field of Hastings, Wayvern Abbey was a show-place renowned for its historical associations, the Marsland diamonds were superb; what more brilliant lot could she choose for her beautiful daughter? Yet Lady Travers, whose chameleon-like character was adaptable to any and every society, and who was dubbed by some people a flirt and by others a prude, had either forgotten, or did not choose to remember, that though Lord Marsland was of ancient lineage, he, and his father before him, had been unworthy of their ancestors; that, beautiful as was Wayvern, it was said to be deeply mortgaged; that, splendid as were the diamonds, they had been worn by more than one unhappy wife.

"Rose will make everything straight; she is so sensible," was her final comment; and, far too practical a woman to waste her valuable morning time in idle dreaming, she rang the bell, to ask the servant if Miss Travers' dog had been found yet. At the same moment Rose came rushing into the room, breathless with excitement.

"Ah! I am here first," she cried. "Have you heard the news, mother?"

"No, my dear. Please be calm; you know how much I dislike your bouncing into the room in that manner," responded Lady Travers, who had an instinctive horror of anything like excitement. She herself was always quiet, and it was a favourite maxim of hers that "there is no dignity without perfect repose."

"How can I be calm, mamma, when a whole tragedy has just been enacted in the village, and I am the first to tell it to you?"

"Well, what is it? Not Bruin, I trust?"

"Nothing more nor less than Bruin. Don't be frightened, mother—he is dead."

"Thank goodness."

"Now for my story—oh! here is the heroine herself," as Dolly entered the room, with her father, "but where is the hero?"

"Ring the bell, Rose," said Lady Travers, cutting short her narrative, and forcing Dolly into an armchair, "this child is going to faint."

"No, no, I am not," smiled Dolly, "I am only a little shaky."

"Of course you will faint, Dolly; it is quite the right thing for a rescued heroine to do," put in the irrepressible Rose, "only you ought to have done it on the spot, in order to be brought round by the hero, as they always do in books."

"Rose," said her mother, in a tone of stern rebuke, "never let me hear you talk in that vulgar, schoolgirlish strain again. I am ashamed of you."

Rose coloured, and her eyes flashed, as she commenced whispering to Dolly, whilst Lady Travers turned to her husband and asked for "a calm, reasonable explanation."

His daughter chafed with impatience while Sir Augustus slowly and minutely went over the circumstances of the morning, clothing them in heavy, cumbrous language, which made Dolly smile, and caused Lady Travers to say more than once, "Yes, I quite understand; go on." He came to an end at last, and now it was Dolly's turn to receive a rebuke. Her stepmother admonished her severely on going out so early in the morning, on her foolhardiness, as she called it, in snatching little Joe from Bruin's very jaws, and finally on the fact that Mr. Ingram must be very much astonished at finding her wandering about alone.

If Dolly had not felt so utterly and entirely wretched, the lecture would have caused her much inward mirth, but, as it was, she did not in the least take it in. But one thought filled her mind—how she was to avoid seeing Geoffrey Ingram again before either he or she

went away. On one point, however, she was fully resolved: should she see him again, she would at once, cost what it might, tell him of her engagement to Harry Leonard; and then—ah! then?

Lady Travers, also, was quite determined that Dolly should meet Geoffrey no more.

"Luncheon will be ready directly," she concluded, "and as you are evidently not fit to come down-stairs, I shall send it to you in the school-room."

"Thank you," said her step-daughter, how gratefully Lady Travers could not guess. She had already turned her back on the culprit, and was busying herself with some work, so Dolly slowly rose and walked up-stairs to her bed-room, accompanied by her sister, to whom she had to relate the whole affair over again, as soon as they were by themselves. Rose could not imagine the acute pain she was giving Dolly in forcing her to mention Mr. Ingram's name, nor the relief it was to her when the gong sounded and she was left alone.

Yes, alone to think. For the old struggle was raging fiercely, and she must fight it out, looking it bravely in the face, single-handed, and in solitude.

She knew what was right, what was true, what she had promised, but there were tempting voices that would whisper to her specious words that forced themselves to be heard, that it was wrong, more than wrong, sinful to marry one man when she loved another better; that her father would not allow her marriage with Harry; that if they were to come together it would be in defiance of his wishes, and was not that, too, sin? On the other hand, there would rise up a vision of Harry as she had known him all her life; of their childhood spent together; of his warm, undeviating love for her, ripened, under the cedar-tree, into a passionate devotion; finally, of what he would become without her. She could see him—for her mental penetration seemed singularly clear—sinking lower and lower in the social scale, seeking the society of his inferiors, casting away in disgust all the advantages of the excellent education he had enjoyed, his faith in woman, perhaps—and the thought made her shudder—his faith in God shattered, his affections mortally wounded. And then her whole heart, beating for him with a warm, sisterly affection, would go out to him, and she would once more be with him at Holme Regis, sitting beside the stream, and see his honest boyish face looking at her in worshipping adoration. Poor child! it was a hard battle; for she was very young, and she had no one to whom she could turn in her trouble. This was far too delicate a matter to be spoken of to any mortal ear; alone she had hitherto borne it, alone she must face the crisis, now it was come.

So she sat on and on in her room, heeding neither cold nor hunger, with a white face of stony misery, in one hand Harry's letters, in the other Geoffrey's books, going over and over again the same ground, the same arguments, till, with the reading for the fourth time of Harry's letter on her knees, the victory was finally won. At the same moment Gretchen knocked at the door, and told her that her luncheon was perfectly cold; then, for the first time, she remembered it was to be in the school-room.

She had not entered that room since Ferdie's death; it was too intimately connected with him and with Geoffrey, and hitherto she had shrunk from it. She was half-inclined to avoid it now, and have her luncheon brought to her, but on Gretchen remarking imploringly that she had made up a nice fire in the school-room, and that it was much too cold for "das Fräulein" in her room, she forced herself to enter it once more.

How strange it looked without Ferdie, and yet how familiar! There was his little couch, his reading-table that Geoffrey had made him, on the lower shelf of which was piled his library, an odd medley of German tales and poetry, historical romances, books of travel, and a very much torn and dilapidated volume of Shakespeare, which he had conned by the hour together, remarking to Dolly that "he was awfully fond of Shakespeare, he knew such a lot." There was the scrap-book she had made for him, the pictures she had framed and hung, everything just as it had been, only no Ferdie, no Geoffrey. She had cried so much during these three weeks, that she seemed to have no tears left, as she gazed on all these tokens of her darling boy, with dry burning eyes. She ate a few mouthfuls, a mere pretence of luncheon, and warmed her cold feet, thinking, thinking round and round in a ring, as though her mind had got entangled in some dense forest, and could not force its way out. Clasped tightly in her hand, as it had been some talisman, she held Harry's last letter, dated from Florence, breathing in every line his inextinguishable love for her, his longing for England, and as she read and re-read it, she hated herself more every minute. That letter she would answer now; put a seal to her resolution by writing it in black and white to Harry.

She drew towards her the portfolio and inkstand, and tried to begin. What a wretch, what a hypocrite she felt, as she inscribed the first words, "My darling Harry." True, she loved him warmly and sincerely, loved him as she loved her brother Jack, only her affection dated from a far earlier period. There was no exaggeration, no dishonesty in the words, yet they seemed to her stamped with untruth. Three sheets of paper she spoilt with the tears that were falling now, and then she gave up the task as beyond her powers, and returned to gaze into the hot coals, and read Harry's letter yet once more.

"He will never know how wicked I have been," she said to herself, "he must never guess. I will be the best of wives to him, like all that he likes, care for all that he cares for, and then perhaps, some day, I shall—forget." In her mind's eye, she saw herself visiting the stables with Harry, sitting by him whilst he fished, or doing the same herself, walking with him to the keeper's lodge, spending an hour or so among the shooting-dogs, accompanying him to the farm whilst he organised a rat-hunt, attending that delectable sport, riding with him, hunting with him, reading to him of an evening until he went to sleep, becoming learned in shorthorns, sheep, and pigs. It was a picture which formerly had looked bright and sunny enough. To live at Holme Regis, to be Harry's wife,

with horses, ponies, and dogs at command; with out-door life and out-door exercise in summer; with riding, walking, and a splendid library in winter; with Mr. and Mrs. Bruce and all the dear people she had known from her babyhood close at hand, at seventeen had seemed to her little short of an earthly paradise. But Wrangham had opened her eyes—perhaps too wide—and these two years had taught her that a man may be a sportsman, and yet possess a keen cultivated intellect; that he may have polished manners, and yet be no *petit maître;* that he may be true and honest, and yet not necessarily bluff and brusque; in short, that there was a very wide difference between Geoffrey Ingram and Harry Leonard.

Her meditations were interrupted by a knock at the door, which caused her heart to beat loudly with apprehension, and tied her tongue. But when the knock was repeated she recognised it as Gretchen's, and crying, "Come in," rose to busy herself with some trifle at the other end of the room, in order to hide her tell-tale face from the eyes of the maid. But there was no necessity for this little manœuvre, for Gretchen simply thrust her head into the room, murmured something unintelligible, and withdrew once more. Thinking she had only looked in to see how the fire was burning, Dolly turned round again to recommence her letter to Harry—this time, she hoped, with a braver heart—then started to find that she was not alone. Opposite to her, grave and quiet, with an expression on his face that she had never seen there before, stood the man who had been in her thoughts incessantly for the last three hours, the one man she wished to avoid—Mr. Ingram!

CHAPTER THE TWENTY-SIXTH.

ENLIGHTENED.

WHEN Geoffrey had left Joan at her hall door, he had found on looking at his watch that the morning, and with it a valuable opportunity, was so far gone that it was long past the Wrangham luncheon hour.

As he walked swiftly along towards the Manor, he could not help puzzling over Joan's peculiar manner to him this morning. That she had seen him and Dolly together was very plain, but that that should cause the strange expression on her face, and point her words, and influence her voice, was more than he could comprehend. Why should not Dolly and he be engaged if they had a mind so to be? Joan herself, so said Lady Travers, was sure to marry Lord Rushbury sooner or later, why should not Dolly do likewise? He liked Joan, her character interested him, and he had early found out all the good that underlay her brusque exterior. Two years ago, he remembered with an amused smile, he had been slightly in danger of more than liking her, when Dolly had risen on his horizon. Yes, certainly Joan had been very strange, unlike even her variable self; he supposed it was Bruin's death, and the foregoing tragedy. Or could it be——No, that was absurd. They had always been such excellent friends, and nothing more—she such a sensible, practical woman—a little vehement, a little *prononcée*, but above all, unromantic; a woman who would go up to bed with a volume of Stuart Mill under her arm, and who, when in Germany, had greedily devoured the hardest, driest, and stiffest of the philosophical works of that most philosophising nation, who hated music, and liked to dress herself as much like a man as was compatible with her real lady-like feeling—no, it could not be.

And yet, unbelieving as he tried to be, the conviction grew on him, after that one flash of illumination, that Joan liked him considerably better than he liked her. That she had once refused Lord Rushbury he knew—could it have been for his sake?

Geoffrey Ingram had his faults, but he was neither vain nor petty-minded; he took no pleasure in working havoc in women's hearts, in order to gain the cheap distinction of being considered fascinating, and he was annoyed, very much annoyed at his own unexpected solution of this question, more particularly as many little things would rise to his memory, all tending to confirm him in his suspicions. These reflections brought him to the Manor door, and, with his entrance into the house, vanished all thoughts of Joan, Dolly his only care. How was she? he wondered. How she had trembled as he held her hand, and how white and thin she was! And with what a world of exquisite pathetic love she had looked at him from out of her sweet brown eyes! He had not much time for these lover-like meditations, for a buzz of voices was proceeding from the dining-room, and there he found the party assembled—all but the one he came to see.

"Welcome, Geoffrey, the wild beast slayer," cried Rose, to whom the whole affair was a pleasant change in the dreary monotony of the last three weeks.

Geoffrey smiled. "Where is Dolly, Miss Travers?" he asked, in quick alarm.

"*Dolly*," in a marked manner, answered Lady Travers, "is up-stairs; she is quite upset by the events of this morning, brought on entirely by her own folly, and has to keep her room for the rest of the day. I am sure, my dear Geoffrey, Sir Augustus and I can never, never thank you sufficiently for your promptitude and presence of mind in saving her from that fearful animal."

Lady Travers had on her what Ferdie used to call her "Court manner," and was resignedly impressive, as with an under-current of pious thanksgiving.

"But she is not really ill, I hope?" asked Geoffrey, who was no diplomatist, or who had, at any rate, forgotten his tactics in his anxiety.

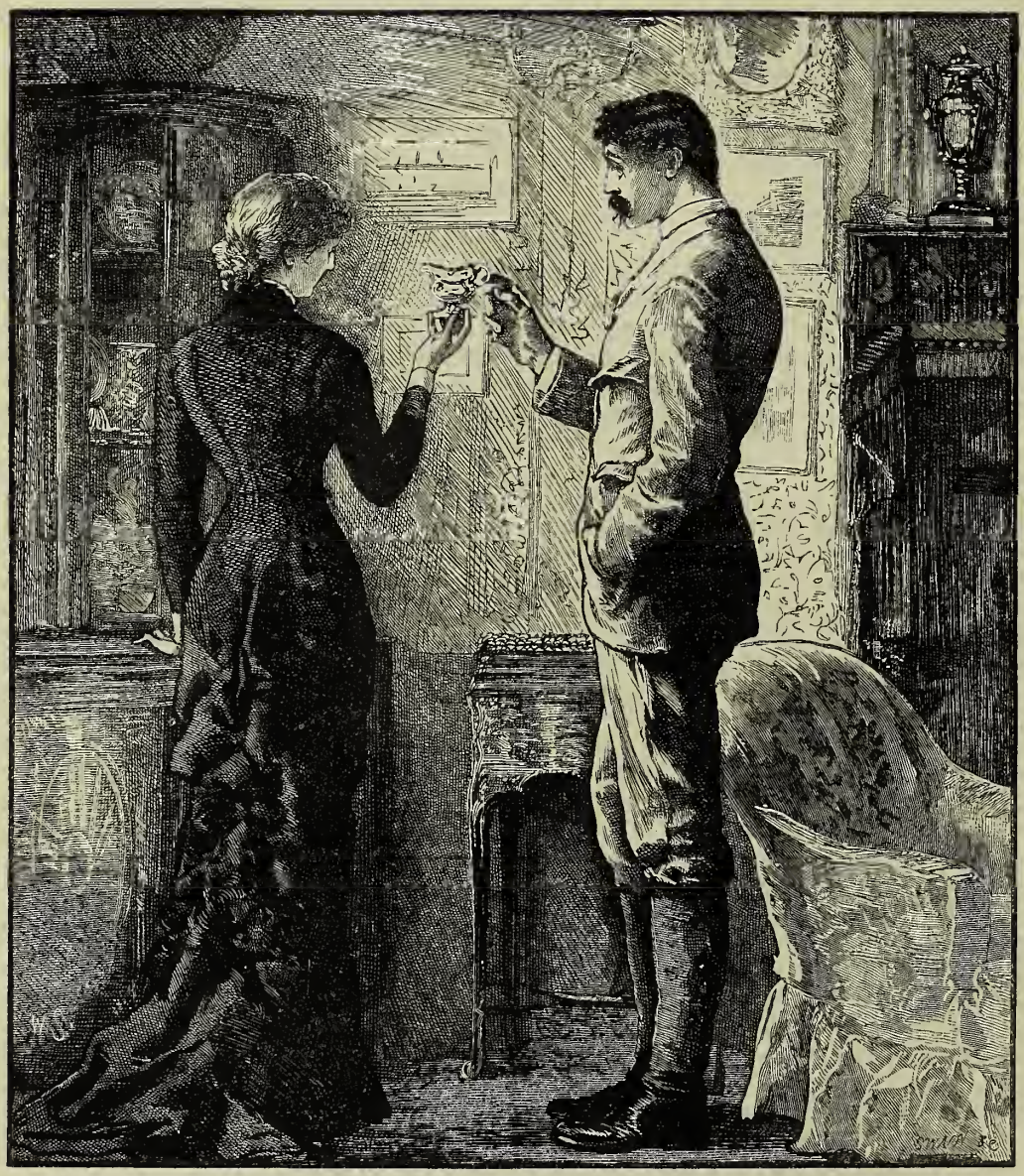
"Not seriously—no," responded Lady Travers, "but nervous and shaken, requiring care. I shall not permit her to leave her room for the next three days. Poor child! she is not of the stuff of which heroines are made." Geoffrey's eyes brightened ominously.

"Don't you think so, Lady Travers?" he answered. "It struck me this morning that her rescue of little Joe was rather an heroic act, in the teeth of a mad dog."

"Have some pie, Geoffrey?" interposed Rose, with

a broad smile on her face; and the rest of luncheon was spent in edifying head-shakings from Sir Augustus and Lady Travers over Joan, after all by far the most culpable miscreant, quite eclipsing Dolly in the enormity of her misdeeds.

said to him, as she rose from the table, "and give me your opinion on it," and so saying, she carried him off to her sanctum, preventing his getting a word with Rose, or his special ally, Lou. She did it so charmingly and naturally that no one could have suspected



"THE PIECE OF CHINA WAS PRODUCED FROM A CABINET" (*p.* 453).

This soothing occupation quite restored the husband and wife to their usual serenity, rudely shaken by what they most dreaded in the world, the having drawn a certain amount of notoriety upon themselves, or rather, on their belongings; and by the end of the meal Lady Travers was relating to Geoffrey her discovery of a beautiful bit of old Worcester china in the cottage of a new-comer into the village, which she had purchased for a mere song.

"You must come into my boudoir, and see it," she

her of a motive; and, inwardly wishing the Worcester china at the bottom of the sea, Geoffrey followed her.

The bright spring-like sunshine came pouring into the little room, touching up with its gilding rays all the innumerable beauties and luxuries of the dainty little apartment. It seemed like a good omen to Geoffrey. It was weeks since the sun had shown itself, and that it should have come out to-day surely meant success.

The piece of china was produced from a cabinet, looked over, examined and discussed; and, as Lady Travers replaced it on its ledge, she turned to Mr. Ingram with her most fascinating smile.

"Do you know, Geoffrey," she said, "I am almost as bad as poor little Dolly; I cannot get over this morning's events. It is too horrible to think of what might have happened, and if we are grateful to you, what will poor Harry be?"

"Harry! who is Harry?"

"What have I said? My dear Geoffrey, it was a slip of the tongue, you must take no notice of it."

"But surely, Lady Travers, you will allow me to know who the person is who is going to be grateful to me?" The voice was resolute, but Lady Travers saw that he had turned suddenly pale.

"Well, as I have accidentally let out so much, I suppose I must reveal the whole secret to you. But it is a secret, I assure you, and before I tell it to you, I must have your promise that you will not breathe it to a creature."

"There is my hand upon it."

They were both standing before the fire, Geoffrey tall and resolute, his eyes fixed on Lady Travers' face, as though to compel from her the truth, the whole truth, and nothing but the truth, whilst hers, sinking below his gaze, were bent upon her chatelaine, with which she was toying.

"Well, then, Harry is a young man to whom our dear Dorothy is foolishly engaged to be married." Geoffrey started, but she pretended not to see it, and went on in the same voice.

"Neither her father nor I approve of the engagement, but Dorothy is, I grieve to say it, wilful and obstinate to a degree that you would never imagine. The boy—for he is nothing but a boy—is fast and wild, and in every way undesirable; but when two young and silly people are in love, what can you do with them? By keeping the affair a secret from every one—her brothers and sisters know nothing of it—my husband and I hoped to wean her from this foolish attachment; but she has been in communication with him again lately, I am sorry to say, and obstinately adheres to her resolution to marry him eventually;" and at length Lady Travers looked up, and returned Geoffrey's gaze.

She had not been a single moment too soon, she thought, as he stood there, as though turned to stone, "absolutely petrified," she afterwards told Sir Augustus, till, becoming aware that she was looking at him, he forced himself to smile, or rather to contort his features.

"Has it been going on long?" he asked, with a vivid remembrance of the baron's story of the meeting in the pine-wood, which he or some one had witnessed, yet at the same time insensibly connecting the name Harry with Harry Cartwright.

"Oh! yes, some time. But I fear Dorothy was not at all properly brought up by those well-meaning, but foolish people, the Bruces, and she has no idea of the duty she owes her father and me. We hope and trust that her eyes may be opened in time, and that she may see how wrong her conduct is; at present we can only be patient. You will keep our secret, Geoffrey? we are most anxious it should not be known, in case dear Dorothy should come to her senses, and then the world need never learn what an undutiful daughter she has been to us." Lady Travers sank down into the depths of an easy chair, looking at Geoffrey with an air of injured motherhood most touching to see; but his eyes were fixed on the coals, and he said nothing.

For a minute they remained thus in perfect silence, and then Mr. Ingram roused himself, as from a dream.

"I will keep your secret faithfully, Lady Travers," he said, "and I hope—the affair will come right. Good-bye. It is really good-bye; I go to London to-morrow."

"To-morrow! I thought you were not off till Monday?"

"No, to-morrow I go."

At the moment Lady Travers felt very sorry for him, as she bade him warmly adieu, wishing him much success and happiness in Rome. In years long past now, he had been her "handsome boy," who had worshipped at her shrine, with all a boy's ardent fervour. They had learnt to know each other since then, but she had an instinctive feeling that if ever she were in want of a friend Geoffrey Ingram would be staunch and true, and if she were in trouble, she would turn to him sooner than to any one else. So it was with real sincerity she wished him all prosperity, and telling him that Sir Augustus and the girls were in the library, saw him depart from the room, a sadder and a wiser man than when he entered it.

"Poor Geoffrey!" she murmured, "he is indeed far gone. I dare say he thinks I could not possibly have found it out from his manner. I had better see him safe into the library, or he will be meeting that tiresome girl," and Lady Travers looked over the staircase and saw Geoffrey, to her satisfaction, turning the handle of the library door. Contented, she returned to her boudoir, and sat herself down to think.

The danger from Geoffrey was averted; how to prevent the marriage with Harry was the next consideration. However, it was early days for that yet, there were many and more important matters to be turned over in that restless scheming mind, which, for all its external repose of manner, was like a ceaseless machine, for ever arranging, sorting, sifting, and managing. The quiet, comparatively uneventful life at Wrangham was as the calm of the convent to her, after years of tiny political and social intrigues at small foreign courts and towns, which had been as the breath of her existence, and which she sorely missed; but at present she had sufficient food for thought, in that she had two affairs on hand at once—to secure Rose's marriage with Lord Marsland, and to prevent Dolly committing matrimony at all.

Meanwhile, Geoffrey reached the library, walking down-stairs like one in a dream, or rather as though he had been stunned. Dolly engaged to be married! that was all he kept on repeating to himself, over and

over again, as though striving to impress it on his mind. Could it be true? That was the next question. Lady Travers' word was not always to be taken in full trust and reliance; she had a habit, he knew, of representing facts as she wished them to be, and not as they were, yet in this instance everything pointed to her having spoken the truth.

He had no doubt in his own mind that the "Harry" in question was Harry Cartwright, the scapegrace of the Cartwright family, who, under the safe footing of cousinship, had found his way to Dolly's heart. What might not have passed between those two during these last two years, whilst he had been in Berlin? At any rate the boy had been as her shadow at Christmas time, when, as he knew, he had, much to Sir Augustus' annoyance, arrived at Wrangham, with his mother and brother, uninvited.

All this pointed but to one conclusion; yet how could he make Harry Cartwright tally with the young man in the pine-woods, whom Dolly had met only a month after her first return home? Stay! he had found the clue.

Who was it? Why, Harry himself, of course, descanting one evening, boy fashion, to him of Dolly's beauty. Had he not mentioned that he had met her first, when she was living with the Bruces, at a picnic given in the Holme Regis woods? That explained it all, and his heart sank to think that Dolly—his ideal—should have deliberately chosen for her future husband a boy such as Harry Cartwright.

Not that he condemned the laughter-loving, high-spirited youth, with his endless practical jokes, his reckless expenditure of money, as hopelessly wicked and irreclaimable, as did Sir Augustus. On the contrary, from the calm heights of his own advancing middle age, he recognised that there was much that was lovable and improvable in this black sheep, who yet was no fit husband for such a girl as Dolly.

And now that he might not have her, that he knew her to be some one else's property, he first felt how sure he had been of her, and how intensely he loved her. But he must bear himself like a man; no one must guess what a wound had been inflicted on him, and, as a first step, he must bid adieu to Sir Augustus and the two girls as though nothing had happened.

They all expressed sorrow at his departure, heartily wishing him joy and success in his new sphere of work, and as they returned to their books and their letters, Rose alone remarked, "How strange Geoffrey looked, Lou—did you not notice it?—as though he had been suffering from nightmare."

It was precisely Geoffrey's feeling. It seemed to him as though Lady Travers' words were a nightmare, and that he should only awake in the presence of Dolly herself.

He left the library with the full determination to see her either to-day or to-morrow, but see her he would.

Fortune befriended him; for, as he traversed the hall, Gretchen was descending the stairs, bearing a tray in her hand.

Gretchen had long ago made up her mind about Geoffrey and Dolly, her *beau-ideals* of male and female worth, so her countenance expanded into a broad smile as she saw Mr. Ingram awaiting her at the foot of the staircase.

"Can you tell me, Gretchen, where Miss Travers is? I should like to say good-bye to her."

"Oh, dear! Do you go away, sir?"

"Yes, to-morrow."

"To-morrow, already?"

"Yes," impatiently. "Do you know where she is?"

"Das Fräulein?" To Gretchen Dolly was, *par excellence*, "das Fräulein."

"Yes, Miss Dorothy."

"Oh! of course I can tell you where she is; I have just taken away her lunch. She seems quite quiet and sad, from the wild dog." And Gretchen stopped to express her admiration for Geoffrey's heroic conduct, by opening her mouth and staring at him.

"But where is she? Tell me quickly, Gretchen; I have no time to lose."

"In the school-room."

"In the school-room?"

"Yes."

Geoffrey's heart beat high with hope. In this case Lady Travers had not been perfectly truthful; why should she be so in the other?

"Just run up, and tell her I am come to say good-bye to her. Never mind the tray;" and, thus adjured, Gretchen walked up-stairs, with Geoffrey close behind her, in mortal fright of meeting Lady Travers. But no obstacle intervened between him and his goal. In safety he reached the shabby landing which marked the children's quarter, as it was called, and saw before him only one door between himself and Dolly. Gretchen knocked, and thrusting in her head, murmured something inaudible. The next moment she had turned to Geoffrey.

"She is in there, sir; go in!" and Geoffrey found himself alone in the presence he best loved.

CHAPTER THE TWENTY-SEVENTH.

"GOOD-BYE."

FOR the space of a minute they stood there, looking at each other without speaking, all Dolly's pulses beating with the exquisite happiness of seeing him once more, with the exquisite pain of seeing him for the last time.

At last—for to them it seemed a long time—Geoffrey found his voice, and at the sound of it Dolly gave a little nervous hysterical laugh of relief, for all he said was—

"I am come to say good-bye, Miss Travers."

No longer "Dolly," or "my darling;" once more "Miss Travers." And yet, such is the extraordinary perversity of human nature, and above all of woman nature, that, in spite of the relief deep down in her heart, there was a feeling of disappointment, of which she was perfectly unconscious—a feeling as of having experienced a moral cold douche.

"Good-bye?" she asked, and not another word could she bring out. As she stood against the table,

leaning on it with one hand, in her clinging black dress, with that sweet pathetic look in her eyes and round her mouth, that always made him think of Guido's Beatrice Cenci, heightened now by her recent tears, she looked so slim, so shadowy, that he forgot all but her.

"Why do you stand?" he asked. "You are fit to do nothing but lie down this afternoon;" and, with an air of authority, he pushed the solitary arm-chair in the room towards her.

"I am quite well," she answered, with a spasmodic smile, and continued to stand. Somehow she felt braver when standing; but when she saw he looked pained, she dropped at once into the chair. She should never see him again—surely it behoved her to show him every courtesy.

He sat down too, close to her, and again there was silence, broken only by the flickering of the fire. The sight of Ferdie's couch and table recalled something to Geoffrey's mind.

"Yes," he said in answer to her last question, "I am going away to-morrow to London; to Rome the following week; so I want to ask you a favour. You know that portrait you took of Ferdie?"

"Yes."

"I wonder if you would make me a copy of it, as a memento of the many—happy hours—we three have spent together."

It required all Dolly's self-command to preserve her calmness at this request, bringing as it did the memory of such happiness as she felt at that moment she should never know again. She clasped her two hands tightly together, as she answered—

"Willingly; I should like to do it so much."

"Thank you—I do not know at present where I may be located in Rome, so *Poste restante* will be the safest address."

"I will send it there, when I have finished it. Would you like it the same size?"

"Precisely similar, if you do not mind."

"Oh! no."

Another short pause, and yet there was no time to lose, Geoffrey felt, for any moment Lady Travers might discover him. Every minute that passed he grudged, as he took his last look at the face that, for six weeks past, had left his imagination neither night nor day. And yet he must arrive at the truth by some means or other—know whether Dolly was to be his, or was already another's. She it was who broke the silence.

"Tell me about poor Joan; how was she when you left her?"

"Wonderfully calm and composed. I could see that she was making a great effort, and she succeeded. What a nice woman she is!" meditatively.

"Very, very nice, and so clever. Poor Joan!"

They were getting further than ever from the point.

"Miss Travers," said Geoffrey, suddenly facing her and fixing his eyes upon her, with such a strange eager look in them that she shrank from his gaze, "Miss Travers, I have heard something to-day which has astonished me much, something which I can hardly credit, unless I hear it confirmed by you. I have been told that you are, and have been for some time, engaged to be married. Can it be true?" In his eagerness he had taken her hand, holding it in a vice-like grasp, which tightened as his words proceeded. The moment had come then.

"It is quite true. I am engaged to be married," and with a supreme effort, Dolly met Geoffrey's gaze steadily and unwaveringly. His clasp relaxed, and his hand fell to his side.

"True!" he reiterated, "true!" and his voice wrung her heart, for there was a kind of moan in it.

"It is not my fault that my engagement has not long ago been openly proclaimed," she added. "Papa does not approve of it, and it is against his wish that we are engaged; but I am of age next September twelve-month, and then—I hope—we—shall—be married."

"You will be married?"

"Yes; we hope so. Oh! don't be shocked. I do not wish to be undutiful or disobedient, but Harry and I have been engaged two years. I have known him a long time, and—and—he is all alone."

But Geoffrey hardly heeded the latter part of her sentence.

"I am not shocked, my child," he said, so sadly that it went through Dolly's heart. "I know well what you have to contend against; but the question is, is he worthy of you?"

"I do not know what they may have told you against him, but whatever it may be, I am as certain it is not true as that I am sitting here now. Papa, I am sure, has been misinformed, but I know Harry."

Geoffrey felt his heart die within him. How she loved this "Harry," and what an affection worth having was hers, that would credit no evil of the beloved one! For himself, he believed every word against him.

"Who does know any one?" he asked bitterly; then, struck by the utter sadness of her face, "only, Dolly," he continued, "don't—don't make a mistake. You are young—you know but little of the world; but, even in your small experience, you must have found out what a lottery marriage is. Look round you, and take warning from the many ill-assorted couples that meet one every day—when good and refined women are mated to their inferiors. Oh, child! I could not bear to think of such a destiny as that for *you*."

"He is not my inferior; he is as good, as true, as generous ——" "as you are," she was almost about to say—"as any man can be," in a low broken voice. That last adjuration, "Oh, child!" had very nearly upset her courage.

"Then, good-bye." He rose, as he spoke the words, and she did the same. He took her hand in his, holding it long and fondly.

"Good-bye, Dolly. I wish you—and him—every possible happiness—every joy—that you deserve—that he may indeed be worthy of you—which seems to me impossible."

He could not let her go; his clasp only tightened on her hand, whilst she, quite passive, with deadly

white face, and parted lips, fixed her sad eyes on him, trying, though unsuccessfully, once more to thank him for saving her life. What was it Geoffrey saw in those eyes, read in that face, that made him feel—ay, know—that his love was not absolutely unreturned? Whatever it was, he drew the girl close to him.

"Good-bye, dear child; God bless you, Dolly, and give you happiness," he said, firmly and manfully, raising her limp unresisting hand to his lips, and kissing it reverently and tenderly. Then, without another word, he tore himself away, and was gone. Like a statue Dolly remained as he had left her; she did not cry, or moan, or even speak; motionless, as though carved in stone, she stood, rooted to the spot, looking at the door through which he had disappeared. Suddenly the canary—Ferdie's canary—burst out into joyous song. The shrill clear notes, indissolubly connected with her boy, made Dolly shudder, but there were no tears. Like a stricken creature, she moved to the window and looked out.

He was walking with bowed head, so different from his usual erect self, down the drive, so slowly—oh! so slowly, but still she did not turn her eyes away. She watched and watched till he had faded, down the long winding drive, to a mere speck, and then once more the old question and answer began to be busy in her heart.

"He saved my life, and how have I requited him?"

Round and round it whizzed and buzzed in her head, till she felt that she could bear it no longer.

"I will go and see Joan," she cried; "I must do something, anything, only not think of him—of him," and opened the door.

On the landing she espied something bright lying on the carpet, and stooped mechanically to pick it up. A small gold locket, one she knew well, it was. Geoffrey had always worn it on his watch-chain, and once, when teased about it by Rose, had announced that he intended to give it to the woman he should choose for his wife.

Dolly held it in her hand—dear little locket! something of his. How she longed to keep it. The slow tears welled out of her eyes, and fell upon its gold surface, and she took out her handkerchief and wiped them off tenderly as it had been from the face of a child. But he would be missing it, and worrying about it, for it was evidently precious to him. How could it be restored to him before he had time to miss it? She walked down-stairs, just in time to see her father mount his horse, and to his charge she confided it.

"Will you tell Mr. Ingram, papa," she said, for she felt she must send him a message, "that I found it;" and Sir Augustus, asking no questions, took it and rode away, leaving Dolly to encounter her stepmother, who was just going out with her two daughters.

"My dear Dorothy," she said kindly, "you look more dead than alive. The part of heroine does not at all suit you, and if Bruin had bitten you, you could not look more ghastly. Pray go to bed at once, if you feel ill. Certainly black is not becoming to you."

Dolly smiled, a pathetic little smile.

"I was going to see Joan," she said humbly.

There was a shade of irritability in her ladyship's manner. Weakness or illness never appealed to her; they irritated her.

"Go and see Joan!" she answered, "go to bed you mean. I am sure it is the best place for you, in your present state of nervous debility; besides which, I am going to the Lodge;" and Lady Travers passed out to the carriage that was awaiting her, murmuring to herself—

"Heroic indeed! What will not a man in love say? A poor weak little thing, without an ounce of pluck."

Meanwhile Geoffrey pursued his way along the meandering drive, past the patches of snowdrops and crocuses that this very morning had seemed to him to lift their yellow, purple, and white heads with promises of success, and of which he had gathered a handful to give to Dolly. This afternoon he trod them ruthlessly under foot; the birds which had sung so joyously this morning, were singing still, but he did not hear them. His thoughts were very bitter. He had lost the one woman he had ever really loved, and the world seemed but a dreary place to him. Even if she were not, as he more than suspected, indifferent to him, she belonged to another, and was to marry that other sooner or later. In the very first burst of his sorrow and disappointment, he had been inclined to blame Dolly for her share in it, but very quickly his naturally just mind recognised that she had been in nowise to blame, and that Sir Augustus and Lady Travers alone were culpable, if any one was. She had never encouraged him, save by her simple unaffected pleasure in his society; no—and for that he was grateful—she had not fallen one iota in his esteem, and if she were going to marry a man in every way her inferior, was not that so very generally the case with the very best and nicest women, that it almost seemed like a law of nature?

But he was smarting, smarting with pain, and so engrossed was he, that not till he came up to it did he recognise that he was close to the Lodge gate. The sight of its iron bars recalled to him Joan. Why had he chosen to throw away what he might have had, in order to stretch out his hand after what might never be his? Joan would have welcomed him with all the warmth and devotion of her ardent nature. She was alone, solitary, unhappy, so was he. He halted before the gate, then slowly opened it, and walked up the drive; he would just inquire how Joan was after this morning's tragedy. As he approached the garden, he saw two men busily at work under the great lime-tree on the lawn, where she was wont to sit in the long summer evenings, with her books. There they had buried poor Bruin, and were now turfing over the spot. All the blinds in the house were drawn down, as for some one dead, and all around reigned a death-like stillness. Geoffrey inquired of the men whether that was Bruin's grave, and on being answered in the affirmative, rang the door-bell.

"My mistress can see no one," the servant asserted, before he had time to speak. "She is going to Rushbury this afternoon, and will not be home again for some time. Her ladyship's carriage will be here for her very soon."

Geoffrey inquired how she was, left his card, and retraced his footsteps. Once outside the gates, he recognised the danger he had escaped. Had he seen Joan, who could tell what, in his deep disappointment, he might have said, led on by the charm of the lord's father, as was in fact the case. Lord Rushbury was by nature and tradition slow and old-fashioned, and the perfect picture of a courteous gentleman. In the carriage sat his mother, a handsome old lady with silvery hair, and the melancholy eyes that her son had



"AND TO HIS CHARGE SHE CONFIDED IT" (*p.* 456).

consciousness of her affection for him, only to be bitterly repented hereafter? That she was utterly unsuitable to him in every way, in his cooler moments he knew well, and as he pursued his weary way—for so it seemed to him now—he could not but be grateful for the chance that had closed her door against him.

He had nearly reached Wreford when he met the Rushbury carriage, an old-fashioned, heavy vehicle, that looked as if it had been built for the present inherited from her. As Geoffrey lifted his hat to her, "She will be far better off there," he soliloquised, "and I suppose it will come to that."

At that moment Dolly was sending off a letter to Mr. Bruce—a very short letter :—

"DEAR UNCLE TOM,

"I want to come home. Put me anywhere, in a garret or a loft, only let me come home at once.

"Your very loving

"DOLLY."

CHAPTER THE TWENTY-EIGHTH.

FELLOW-COUNTRYMEN.

"CAN you tell me the name of the street where Donato, the sculptor, lives? I have stupidly quite forgotten it."

The speaker was a young, fair, curly-haired man, obviously English, even before he spoke; the man addressed, tall, dark-haired, and striking as much by his figure as his face, with its deep-set thoughtful eyes, wide forehead, and rather square chin and jaw, was no less so, though cast in a very different mould to his younger compatriot. There was no mistaking the broad shoulders, the erect bearing, telling of English athletics, or above all the firm, springy step, which induced Harry Leonard, although he had only seen his back, to at once address him in his native tongue. They were both standing in the "Tribuna" at the Uffizi, at Florence, where Harry had been painstakingly doing his daily task of sight-seeing. To-day it was easy to him, for, unimpressionable as he was to beauty in its more subtle and refined forms, yet the little octagonal room in the Uffizi, with its walls covered with priceless gems of art, appealed even to his imagination, and it was by no means the first visit he had paid it.

The stranger turned round on being addressed.

"Donato?" he answered, "I think his studio used to be in the Ognissanti, but it is some years since I have been in Florence; he may have moved."

"No, that is right, that is the name of the street, I remember. I am much obliged to you," and bestowing one of his frank smiles on the strange Englishman, Harry left the gallery to seek the great Donato's studio.

Not that he knew anything about sculpture. To him, a statue was a statue, and nothing more, a bust the representation, and to his mind a very incomplete one, of some person; but for the spirit that breathes through the marble, or the genius that awakes that spirit, he had no comprehension. But he had been told by his friends that before he left Florence it was his duty to see the celebrated Donato's studio, who moreover had on view a famous group of statuary for which he asked a fabulous price, that no one but an Englishman or an American would give. What if he bought it for Dolly?

Meanwhile Geoffrey Ingram, for he it was of whom Harry had inquired the address, having taken a last lingering look at all his old favourites, found that he too ought to be wending his way from the gallery to his hotel. He had reached Florence early that morning, and having breakfasted, had set off almost immediately for the Pitti Palace. He had many friends in Florence, but just now society was irksome to him, and he felt that the contemplation of the divine Italian pictures would be a soothing and healing medicine to his troubled mind. From the lofty heights of their calm devotion, their exquisite tenderness, the Raphaels, Peruginos, and Fra Bartolomeos looked down on him, making his sorrow momentarily to fade to its right proportions before their heavenward gaze.

And so from the Pitti to the Uffizi he continued his lesson, and came away calmer than when he had first entered.

"A nice boy, that," he thought to himself, as he recalled Harry's abrupt question. "I have half a mind to go and see old Donato myself. I dare say he won't know me again;" and, without thinking of what he was doing, Geoffrey turned his steps towards the famous sculptor's studio. He recognised from a distance the wooden doors that shut in so much that was precious, and outside which stood the young Englishman, apparently engrossed in studying the sculptor's name written, or rather scrawled, in white chalk on the door.

As Geoffrey came up to him, Harry recognised, with pleasure, his friend of the picture-gallery. Overcome by a fit of truly British shyness, of which he possessed more than his fair share, he felt quite unable to face the great sculptor by himself, especially as he knew nothing whatever of statuary, and was sure to say the wrong thing. He therefore hailed Geoffrey's arrival with delight, and hearing that he too was going to visit the studio, begged, with a simplicity that rather charmed his new acquaintance, that he might accompany him, confessing that he dared not enter alone those sacred portals.

Mr. Ingram acceded readily to the request, and together they crossed the formidable threshold. Harry found that he had chosen his protector wisely, for he was received with outstretched hands and many expressions of delight by the sculptor, who, attired in loose blouse and white apron, was putting the finishing touches to an exquisite statue of Beatrice Cenci.

And Geoffrey did all the talking, as Harry expressed it, and was taken round and shown everything by the great genius, only too pleased to see him again; whilst Harry, who, turning crimson to the roots of his hair, had murmured something unintelligible in explanation of his presence, followed humbly in his wake, and wished that he knew a little more about such things. The group of statuary he had come expressly to see, "Horatia," the darling of the sculptor's heart, in that he considered it his *chef-d'œuvre*, did not meet with his approval. The subject, Horatia shrinking before her brother's dagger, was not to his taste, and he returned, as did Geoffrey also, with greater pleasure to the lovely sad face of the Beatrice, both of them, unknowing to each other, thinking of the same person, to whom they traced a likeness.

"Ah! Donato," exclaimed Geoffrey, "if I had some spare money, how I should like to buy your Beatrice!"

"She is not sold; you shall have the refusal of her when she is finished;" and Donato withdrew to a short distance from his work, gazing lovingly at his own exquisite creation, as though loth to part with her.

"If you will wait to be paid till I grow rich," said Geoffrey, with a smile; whilst Harry stammered out, "Not sold?" and then stopped in confusion, hardly daring to inquire of the great man what price he asked for it. Geoffrey guessed his dilemma, and kindly came to his rescue. He had taken a fancy to this fair-haired youth, who looked as though he would be so much more at home in an English hunting-field than in a Florentine sculptor's studio, and who was evidently

bent on spending his superfluous wealth on an article of which he knew nothing.

"And what is your figure, Donato," he inquired, "in case I or this gentleman intends to run away with your Cenci?"

With his chisel in his hand, working fitfully at the cords that tied the two exquisite little hands which, even as the face, spoke of pain, and sorrow, and suffering, as did the whole figure, from the crown of the beautiful head down to the dainty feet, the great Donato named a price which made Geoffrey start and Harry smile.

"She is well worth it," responded the former, recovering his astonishment, "but I am afraid my pocket is hardly deep enough to produce the sum. No, I must leave her for some lucky person who has money to spend on works of art." Then, seeing Harry's wistful look, "I think," he continued, turning to him, "you admire her as much as I do?"

Given an opening, Harry, with much trepidation, offered himself as a purchaser of the lovely Beatrice; but Geoffrey did not wait to hear the conclusion of the business. With a friendly hand-shake with Harry, and accompanied to the door by his friend, who murmured, "I would rather sell her to you at a less price," he retired, shaking his head, to muse on Dolly, and her likeness to the Beatrice. That evening's train was to bear him to Rome, and with impatience he counted the hours when he should begin work again, and forget —so he hoped—the face which haunted him day and night. But he had time to smile to himself over Harry's naïve simplicity, and vaguely to wonder who this young Englishman could be who seemed to have so much money, and yet was withal so simple and natural. At the railway station, as he was hurrying into the over-full train, after being penned up with some excruciating countrymen in the waiting-room, he caught once more a glimpse of Harry, also busily employed in securing himself a seat, a matter of some difficulty. Geoffrey found himself wedged in between two Italians, whilst the rest of the company was as polyglot as is often the case on Continental railways. A Swede, a Frenchman, and a German went far towards representing European nationalities, and there was not much chance of sleep.

The times were stirring. Italy, thoroughly roused from her long slumber, was trembling in every limb with life and ardour. Rome had not long been proclaimed her capital, and before her lay stretched out a brilliant future. What could the two grey-headed old Italians talk but politics? How long had they been hoping, and longing, and waiting, fearing that the grave should close over them ere they should see a united Italy! And the soft, sweet Italian accents became harsh and loud, and the fat brown fingers gesticulated wildly, till the whole carriageful caught the infection, and English, German, French, and Swede mingled in the talk. Geoffrey was glad he was going to Rome. He had profound faith in the future of Italy, and he was rejoiced to think that he should be on the spot to watch the phœnix rise, with new glory, from her ashes, and stretch her wings in what had once been the capital of the world.

There was not much sleep to be obtained, and there was still a certain amount of spasmodic conversation going on when, in the early morning, the train ran into the Roman station. "Roma," shouted the guards, and Geoffrey heard them with a strange thrill. Had he not intended to bring Dolly to Rome?

Harry, too, jumped out of the train, half dazed with sleep, and was taken possession of by his servant, who protected him from a crowd of screaming "facchini," and piloted him successfully, with bag and baggage, to the omnibus of an hotel in the Via Babnino—not, however, before he had rushed breathlessly up to Geoffrey.

"I have bought the Cenci, thanks to you."

"No thanks to me," responded Geoffrey, laughing. "Where are you going to?"

"Some hotel. My man knows. Via Babnino, I think."

"I know the place, but I don't like the Babnino. It is low and unhealthy. I shall look you up when I get settled."

"Will you? Thank you. Here is my card. Now I must be off;" and with a nod and smile Harry jumped into the omnibus, and Geoffrey began to think of proceeding also to his destination. In his hand he still held the card presented to him by his new acquaintance, on which was inscribed—

MR. LEONARD,
Holme Regis.

So this boy, with the honest face, was the son of the man who had bought his own paternal estates, was occupying the position he ought to have filled, was the master of Holme Regis. How strange that he should come across him! And yet more—he must know Dolly. She and the Leonards had been near neighbours for years, had played as children together, had grown up together.

Absorbed in these reflections, he gave himself over to the tender care of his servant, and found himself driving through the familiar streets of Rome without so much as looking about him, till, landed at his hotel, he realised that he was now fairly embarked on his new career.

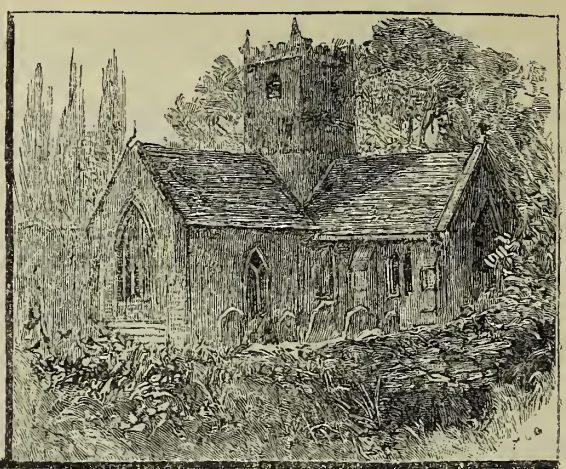
END OF CHAPTER THE TWENTY-EIGHTH.

FIFTY YEARS AGO.

DEAR, dost thou mind the day in God's heaven far away?
Is there left aught of memory for anything of clay?
Do clinging yearnings, tendril-like, for ever earthward stray?
Husband, art thou *alone* in shadow of the Throne,
Until the welcome shall be said unto thy wife—thine own?

Nay, heart! for love Divine hath stilled the cry for *thine*;
The Everlasting Arms have hushed his agony for mine;
There is no yearning where the flowers of Paradise entwine.
Upon the Father's breast my dearer life is blest,
Our golden wedding-day beholds him in eternal rest.

And yet—God's love doth beat in pity vast and sweet,
All human in sublimity of tenderness complete,
All human as when once on earth the babes clung round His feet,
And when His head bowed down in halo of the crown
He bore lest soul as dark as mine should tremble at His frown.







Up in the heaven of Christ, baptised in love unpriced,
Where glory of the Lamb for aye as sunlight hath sufficed,
All tenderness of heaven and earth hath reached its best and highest;
And even in thy bliss, thou mayest remember *this*—
That fifty years ago to-day I kissed a wife's first kiss.

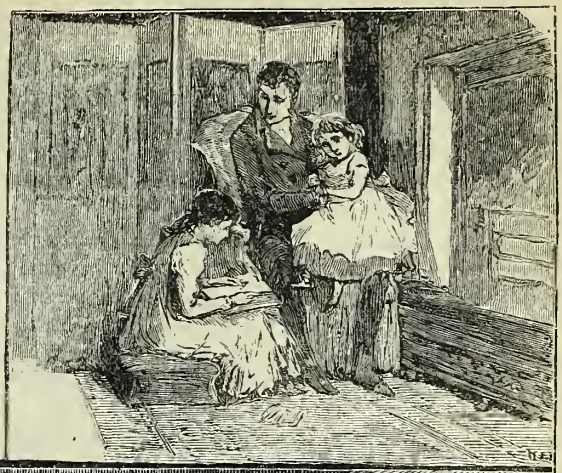
Fifty years ago! since the veil was white as snow
Which the bride-maidens, laughing, on the orange-wreath did throw;
(Where are they all, those happy ones of fifty years ago?)
Our marriage chimes were pealing, over summer meadows stealing,
When, lip to lip, the late-pledged troth husband and wife were sealing.

Then hand in hand we passed, and clasped each other fast,
Into a land of blessing where the flowers should always last,
Into an Eden where the skies were never overcast,
Into a world of love where all below, above,
Should seem as radiant as the stars, and tender as the dove.

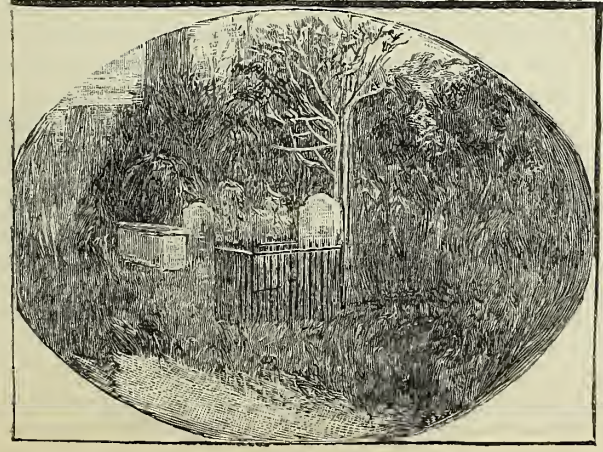
Ah, me! there came the thrill of sudden shuddering chill,
When dawned a lovely little life, and as we blessed, grew still,
When looked an angel on our world, and fluttered from its ill;
Ah, me! we sorrowed sore, my soul seemed welling o'er,
Yet faltered closer to the heart that gave me more and more.

Oh, thou, my dearest, best, my earthly stay and rest!
Five years and forty side by side side up-hill and down we pressed,
And never an ungentle word, and ne'er a look unblest;
Oh, purest heart and fond, that led me still *beyond*
And taught me all of heaven that lies within an earthly bond.

The years so swiftly fled, and many a flower lay dead,
The flowers of hope for wealth and fame that bloomed when we were wed;
But we were satisfied, for God gave sweeter buds instead—
Blue eyes shone into mine, with the dear light of thine,
And children called thee "father," as they spelt the word Divine.







The children, one by one, have fluttered hence, and gone;
I'm dying, dying, dying out like last hues of the sun;
I scarcely mind how many feet about us used to run;
The birds have flown away, the flock has learnt to stray,
They sometimes bring their little ones that I may touch and pray.

But though some memories sleep, *one* love, *one* yearning deep
Alive within this fading heart eternally doth keep,
There is a flood which every pulse doth still for ever steep:
Oh, why art thou away, on this our marriage-day,
Thou who didst promise by my side, through weal, through woe to stay?

"Till death us twain shall part!" Oh, husband of my heart!
There is *no* death, *no* parting, that my soul should shrink or start;
This golden ring, our wedding-ring, shall be my rule and chart—
Our ring for ever found linked in an endless round,
The symbol of *eternal* love, that waits on deathless ground!

MARGARET S. MAC RITCHIE.

WHAT IS THE NATIONAL DEBT?

OUR National Debt—the largest of any nation, with the exception of that of France—may be said to have had its beginning in 1688, when the "King's Debt" at the accession of William and Mary amounted to £664,263. Before that date it had been the custom for kings to borrow money at times of emergency, but it had always been done upon the security of the Crown, and the money borrowed was always repaid within a few years. But when Parliament obtained, by the Revolution Settlement of that date, a strict control over the standing army and the national purse, and it was suggested (it is said by Bishop Burnet) that money could be borrowed on the security of the nation, we find the National Debt to quickly take a permanent shape.

Accordingly, when the finances of the country were in great straits, owing to the war then being carried on against France, a formal establishment of the National Debt was made by an Act passed on the 3rd of January, 1693, by which £2,000,000 sterling were borrowed, to provide funds for the first of our wars on account of the "balance of power in Europe." There being a vast accumulation of private savings in the country, stored away in all sorts of hiding-places for the sake of safety, the opportunity of employing it on a Government guarantee was eagerly seized, and the money was immediately subscribed for; the idea being a new one in this country, though not in Holland, whence many of King William's advisers came. This loan was quickly followed by one in 1693, when the then capital of the Bank of England (£1,200,000) was advanced to the Government at eight per cent. interest, on the occasion of the founding of the Bank and in accordance with the conditions of its charter.

From the small beginning of 1688 the Debt has rapidly increased, the cause always being war (with the exception of £20,000,000 spent in 1833 for the abolition of slavery in the British Colonies)—until in 1857, at the close of the Crimean War, it reached its maximum of upwards of £835,000,000.

For many years, with the exception of the loan from the Bank of England, the moneys borrowed were always of the nature of short loans, of annuities for life, or of terminable annuities, at various rates of interest according to the value of money at the time. For instance, a sum might be borrowed as a short loan at six per cent. interest, the capital to be repaid or renewed at the end of the term; or instead, the same sum might be borrowed as a terminable annuity, the Government paying, say, seven per cent. for so many years, all payment ceasing at the end of the term. In this latter case, the excess interest (beyond the six per cent. paid upon the loan) would in reality be yearly payments of an amount calculated, if put away at compound interest, to repay the lender his capital at the expiration of the term.

The rate of interest paid upon the Debt varied until 1726, when the system was adopted of fixing the rate at three per cent., and making the so-called amount of the loan vary according to the value of money at the time. Thus, the value of money being four per cent., the lender would receive stock of the nominal value of £133 6s. 8d. for each £100 actually lent. It has been estimated that by this method the amount of the National Debt (and consequently the capital sum to be redeemed) is over one-third more than the amount of money actually received.

At the present moment the National Debt (amounting on the 31st of March, 1881, to £768,719,000) consists of the Floating Debt (that is to say, the moneys owing for current advances from the Banks of England and Ireland, and of Exchequer Bills), and of various descriptions of stocks, the four following being the principal:—

(1) Three per Cent. Consols (Consolidated Annuities), interest on which is payable on the 5th of January and July. The origin of this stock was in 1751, when various debts, all bearing three per cent. interest, were *Consolidated* into one description of stock.

(2) Three per Cent. Reduced Annuities, interest on which is payable on the 5th of April and October. This description arose by the funding together in 1757, and since, of several loans bearing varying and higher rates of interest, which were *Reduced* to three per cent.—the reductions being made with the sanction of Parliament, either by agreement with lenders, or by the calling in of the old stocks and the creation of new.

(3) New Annuities, bearing interest at three per cent., payable on the 5th of April and October. These annuities were created in 1844, by the conversion of certain then existing stocks into one fund, to bear interest at three and a quarter per cent. until 1854, and at three per cent. thereafter.

(The term *Annuities*, applied to the above stocks, simply refers to the interest, the capital being repayable at the option of the Government only; the lender, or holder, having no right to demand repayment, and can only realise by selling the debt on the Stock Exchanges.)

(4) Terminable Annuities, expiring at various dates—the principal and interest being repaid to the owner by fixed half-yearly payments, of equal amount, until the expiration of the term.

Various efforts have been made from time to time for reducing the amount of the National Debt—partly from a fear of the decadence and disappearance of such sources of the national wealth as our coal-beds, and partly on the ground of the unfairness of saddling posterity with the cost of wars and charges, &c., entered into for the advantages and purposes of the present and past generations. The first attempt was

that of Sir Robert Walpole (1716), who proposed the creation of a sinking fund, by converting certain temporary taxes (previously imposed for paying the interest of the Debt), into perpetual taxes, and devoting any proceeds not required for the payment of interest to reducing the Debt. As, however, new loans were raised as fast as the old ones were redeemed, the scheme was soon abandoned. In 1786 the Act authorising Mr. Pitt's sinking fund was passed, enacting that the sum of £1,000,000 be provided for in each Budget, and applied yearly to the reduction of the Debt, the amount of the interest of the stock so purchased being again devoted to the same purpose. As, however, the National Debt was being continually increased (as in the previous instance) by fresh loans, the scheme did not work, and in 1829 it was arranged that the yearly surplus, if any, of the national revenue over expenditure should be devoted to the reduction of the National Debt.

In 1866 a serious effort was made by the conversion of some twenty-eight millions of three per cent. stock into short annuities to terminate in 1885—that is to say, the excess of the yearly payments beyond the interest required on the capital converted will at compound interest have by that date recouped the lender the amount of the principal.

Another step was taken in 1875, when, by an Act passed on the 2nd of August of that year, the annual charge for the service of the National Debt was fixed for the year 1875-6 at £27,400,000, for 1876-7 at £27,700,000, and permanently thereafter at twenty-eight millions per annum; all moneys not required for the payment of interest and expenses being devoted to the reduction of the Debt (the amount so devoted for the year 1880–1 was £350,000).

But by far the most extensive arrangement yet made for extinguishing the National Debt is that proposed in Mr. Gladstone's Budget for 1881–2. The proposal is to extinguish by 1906 no less an amount than sixty millions, by continuing to that date two millions of terminable annuities which were to have expired in 1885, and which would then have been applicable to the reduction of taxation. By the conversion of this amount from short into long annuities, a considerable reduction will, of course, be made in that portion of the short annuities which really repays the principal borrowed, the reduction amounting to about £1,550,000 per annum. The sum so saved put aside yearly until 1906 at three per cent. compound interest will amount at that time to sixty millions sterling, so that the new terminable annuities to end in 1906 will have to consist of the yearly reduction referred to of £1,550,000, plus the interest on the sixty millions, that is to say, of £3,350,000.

The sixty millions of Consols required to be so exchanged for annuities are readily found in the existence of stocks held on account of institutions for whose liabilities the nation is responsible. As the Government guarantees the amount in the hands of the Court of Chancery (belonging to estates under the care of the Court), and also the amounts of the Deposits in the Post Office Savings Bank, the funds of these two institutions have to be invested in the Government stocks. Instead, therefore, of having to go into the open market to arrange the conversion of the stock required, the Government simply exchanges for sixty millions of the stock held by the Chancery Court and by the Post Office Savings Bank, the yearly annuity (previously explained) of £3,350,000 to terminate in 1906.

As the funds of both institutions have hitherto always increased, the payments into their hands being larger than the withdrawals, and as they will therefore have to re-invest at least, not only the £1,550,000 per annum required to reinstate the original sixty millions by 1906, but the whole of the annuity in the Government Stocks, it is probable that the result will be to materially diminish the amounts held by private investors, and bring about some scarcity in the markets. The consequence is likely to be a gradual and steady increase of the price (already at about, or over, par), and ultimately yield an opportunity for the conversion of the remainder of the National Debt into fresh stocks bearing a lower rate of interest.

Should this be done, and the amount of twenty-eight millions provided for the permanent service of the National Debt be left untouched, funds will be provided for a still more rapid reduction—to say nothing of the opportunity provided in 1885 for creating further terminable annuities, or otherwise continuing to reduce the Debt, with the present annual amount of the remainder of the annuities terminating in that year.

W. J. W.

A FAMILY OF INVENTORS: THE BROTHERS SIEMENS.



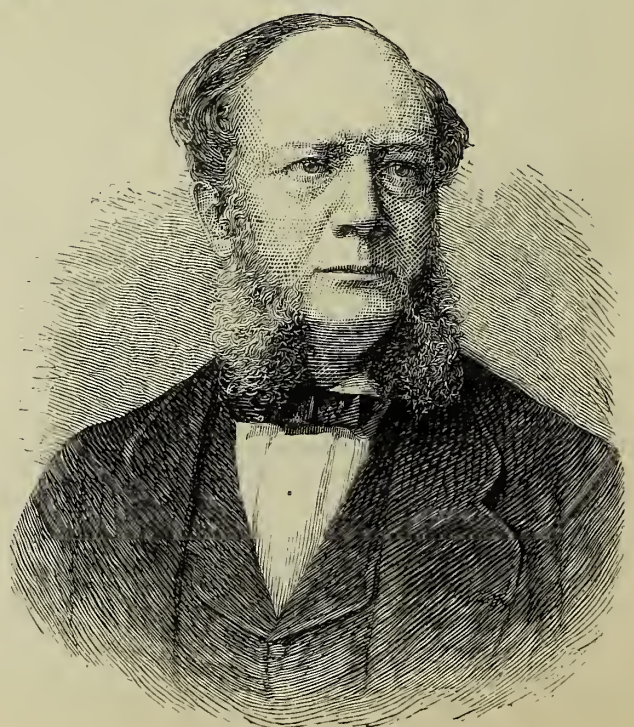
THERE are families in which genius for art or literature seems to be hereditary, but we were not till this present generation aware that the genius of invention could spread its light on several members of one family. The great epoch of technical science and invention is still young, but, as every season brings with it its own peculiar flowers, so will this age enrol in it many eminent men of genius, among whom some will stand out conspicuously, and their names be heard again and again. It would be difficult to find a family more richly endowed with intellectual power and inventive genius than that of the late Ferdinand Siemens, of Lenthe, near Hanover. The sons of this gentleman numbered eight, of whom five are still living. As eminent engineers, as men of enterprise, they stand in the first rank, and three of the brothers have, through their inventions, attained a world-wide fame.

The eldest brother, Werner Siemens—the "Berlin Siemens," as he is generally designated—was born at



FREDERICK SIEMENS.

Lenthe, near Hanover, in 1816. He received his education at the Gymnasium of Lübeck, from whence he went to Berlin, and entered the Prussian Artillery as a volunteer. His eminent talents soon opened to him the doors of the Military School in Berlin; but the theories of velocity and the effects of projectiles seem not to have had much attraction for him, and he turned his attention mainly to practical chemistry and physics. Thus his first invention (1841) was eminently a peaceful one—namely, a new method of gilding and silvering by galvanic deposit. A few years later he constructed, along with his brother William, a new "governor" for steam-engines which attracted much attention, and had an extensive application. In 1845 he brought out—also in conjunction with his brother—the well-known process of anastatic printing, which also met with similar success. On the introduction of electric telegraphs, Werner Siemens' name took a prominent place. The conducting wires, being at that time laid under ground, required an insulating covering. For this purpose Werner Siemens employed gutta-percha; and the machine constructed by him for covering is even now used in the manufacture of cables. In 1848 his military duties called him to Kiel, where Danish men-of-war threatened the German fleet and the defenceless coast. Werner, along with his brother-in-law, Professor Himly, laid the first submarine mines, the precursor of the present torpedo. To this warlike undertaking there followed a more congenial work of peace—the laying of underground cables from Berlin to Frankfort and Cologne. In 1850 he left the army, and with the valuable aid of Mr. Halske, a practical mechanical engineer, founded the far-famed firm of Siemens and Halske. This establishment soon grew to large dimensions, and became one of the chief centres for the application of electricity and magnetism to the industrial arts, while at the same time affording a means of practical training for many young engineers. In 1865 Werner established the pneumatic despatch system, which his brother William in 1871 introduced into England. A very important discovery of Werner Siemens is the block-signal system on railways, the melodious bell-like tones of which may be heard in many countries, and which gives not only more security to life and limb, but lends a certain poetry to the tumult of a railway journey. A most ingenious invention is Siemens' alcohol-meter, an apparatus which registers with perfect accuracy the degree of strength of the spirit which flows through it. The apparatus has found such wide application that the firm had to erect works at Charlottenburg, near Berlin, for its manufacture. The principal purchaser of the alcohol-meter is the Russian Government. Since 1854 Siemens Brothers have had in St. Petersburg a large manufactory for telegraph apparatus, and this business was, till 1869, conducted by Carl Siemens. Very soon the whole Russian Empire was covered by a network of telegraph lines. They also established pottery works, for the purpose of making the well-known china insulating cups for telegraph posts. Werner Siemens is a partner of the London firm of "Siemens Brothers;" indeed, the three firms of Berlin, London, and St. Petersburg are the common property of the brothers Werner, William, and Carl. From these three centres issue forth many branch



WILLIAM SIEMENS.

establishments; even in the far Caucasus the brothers possess copper works and oil springs. From this may be gathered the magnitude and importance of their undertakings.

Werner's newest invention is the electric railway, a model of which, exhibited at the late Berlin Industrial Exhibition, gave as much pleasure as it called forth appreciation. Many honours have been conferred on this most fertile inventor. The University of Berlin conferred on him a Doctorate (*honoris causâ*), and in 1873 he was elected a member of the Royal Academy of Science in Berlin. He was for some time a member of the Prussian Parliament, and is honorary member of many scientific and technical societies in Germany, England, Austria, Russia, America, and even in Asia. Not only by his brother scientists is his name held in esteem, but he is deservedly popular among the German people, who daily in their workshops are brought into contact with the results of his inventive genius.



WERNER SIEMENS.

Here we may now say a few words with regard to Carl Siemens, born 1829. As an inventor he does not come much into the foreground, but the brothers owe much to him for the energy with which he has helped to further the extension of their inventions, more especially in Russia. As formerly in St. Petersburg, so lately in London he conducted the telegraph business with eminently practical results. He has now returned to St. Petersburg, to be at the head of the establishment there. He has also received many acknowledgments of his merits in orders from various countries.

The London brother, William Siemens, was born at Lenthe, 1823, and he also received his preparatory education at the Gymnasium of Lübeck. From thence he went to the Polytechnic School at Magdeburg, and attended the University of Göttingen, where the lectures of Wöhler and Himly particularly attracted him. His practical work began at the engine-works of Count Stolberg. In 1843 it was arranged with his brother Werner that he should visit England, in order to introduce the method of gilding and silvering by galvanic deposit. A year later he returned to England to patent the brothers' joint invention of the differential governor for steam-engines. In the same year was brought out the process of anastatic printing, also an invention of the two brothers. The renowned Professor Faraday delivered a lecture on this subject in the Royal Institution.

Between the years 1844 and 1847, William Siemens was engaged in railway works, in improving Hoyle's calico-printing, and in the invention of his chronometric governor. Several of these governors are in use at the Royal Observatory at Greenwich, for controlling the motion of transit and recording instruments. In 1846 he introduced his double-cylinder air-pump, which even to the present day is exclusively used. In 1851 the introduced his celebrated water-meters (beautiful through their simplicity), which are extensively used both in this country and on the Continent. As regards practical importance and economy in fuel, the invention of the regenerative gas furnace, which he worked out in conjunction with his brother Frederick Siemens, may be looked upon as his greatest discovery, and one which should alone secure for the brothers a world-wide reputation. The properties of these furnaces are so well known that we need not dwell upon them; economy in fuel is combined with the highest degree of temperature, while, at the same time, the absence of smoke is a boon to the neighbourhoods where those furnaces are used in different manufactories.* His steel process, which has now become so general both in this country and abroad, is worked by these furnaces.† For his re-

* William Siemens is at present deeply interested in the subject of smokeless chimneys, more especially in London and other large towns, where the increase of fog has become a matter of very serious consideration.

† It is interesting to record that the last lecture given by Professor Faraday in the Royal Institution was on the merits and advantages of the Siemens furnace.

searches on heat and his metallurgical processes he received the Medal of the Society of Arts in 1850, the Telford Medal in the Society of Civil Engineers, the "Grand Prix" at the 1867 Paris Exhibition, the Royal Albert Medal in 1874, and the Bessemer Medal of the Iron and Steel Institute in 1875. For the laying of submarine cables, William Siemens planned and had built by Messrs. Mitchell, of Newcastle, the well-known steamer *Faraday*, which has proved itself perfectly adapted for the work. The Indo-European lines, as well as several Atlantic cables, were manufactured at the telegraph works of Siemens Brothers at Woolwich. The most important of these submarine telegraph enterprises was the Direct United States Cable, for which the *Faraday* was constructed, and with the laying of which Carl Siemens was entrusted.

William Siemens' great services have also been recognised and acknowledged. He was elected a Fellow of the Royal Society in 1862, and has served twice on the Council; he is Member of Council of the Institution of Civil Engineers, and of the British Association, of which he is President-elect for the meeting of 1882. He has been President of the Mechanical Engineers, was first President of the Telegraph Engineers, and was re-elected to that post in 1878; was President of the Iron and Steel Institute in 1877;* made D.C.L. of Oxford (*honoris causâ*) in 1870, LL.D. of Glasgow University in 1879. He is also a member of the Royal Academy of Science in Stockholm. It would be difficult even for himself to enumerate the various scientific societies which have elected him honorary member. The Emperor of Brazil made him first a Commander and then a Dignitario of the Order of the Rose. In the midst of so much practical activity, William Siemens has still found time to write a number of articles on scientific and technical matters which would require a catalogue for themselves. In theoretical science he is an authority of the first importance.

The fourth of these highly-gifted brothers, Frederick —the Dresden Siemens, as he is called—was born in 1827 at Menzendorf, near Lübeck, a large property rented by their father. Frederick, like his brothers, was intended to pass through the classes of the Gymnasium of Lübeck, but having reached the third class, the desire of liberty urged him to abandon his place on the school-bench and to go forth into the world. He went on board a merchant ship when scarcely sixteen years of age, and there this youth, whose mental capacities afterwards proved so great, had to work as a common sailor. After two years of this seafaring life, his brother Werner tried at Berlin to get him into the Prussian marine service. In the meantime, Frederick was allowed to assist in the manifold experiments of the brothers. This chained him with a very different power from that which bound him to the ship, and out of the young sailor there was soon formed a clever, industrious assistant, who was also an originator.

In 1848 Frederick went to England, and continued his practical studies with his brother William. The principal interest was the newly-discovered regenerative system, and he was so fortunate as to make this system practical by its application to the ordinary furnaces where a very high temperature is required. In 1858 Frederick built, in the works of the brothers in Berlin, the first regenerative gas furnace, which was the precursor of the many now employed in Germany, Austria, &c. The second brother, Hans, possessed a large glass manufactory in Dresden, and on his death in 1867 Frederick undertook the management of this establishment, and concentrated his great talents on perfecting the manufacture of glass. His works at Dresden, as regards the quantity exported, may be considered the most important in Germany. He has established three other factories in Bohemia and Saxony, which give employment at present to 2,000 workmen. The application of gas furnaces to glass-making was a marked epoch in this branch of industry. Important, also, is his invention of the continuously-working glass furnace, in which the materials are inserted, and flow out thoroughly melted and ready for working. A further discovery is a new method of cooling glass quickly, and thus producing "toughened glass." This material will soon compete, for many purposes, with wood and iron. Its power of resistance is extraordinary, and even surpasses that of cast-iron. Frederick has also turned his attention to the possibility of producing a "motor" to perform cheaply and efficiently those small operations in workshops and households which have still to be done by manual labour—such as turning the grindstone, churning butter, driving sewing-machines, &c. Although his idea has not yet been realised, his hot-water "motor," devised on a new scientific principle, has come near the fulfilment of it, and obtained for him at the Vienna Exhibition of 1873 the medal for Progress. In paper-mills there has hitherto been a great waste of the soda used in the preparation of paper, which is allowed to flow away into the streams, on account of the noxious odours which the recovery of the same would create in the neighbourhood. In the large paper-mills of Hainsberg, near Dresden, however, there has lately been erected a Siemens furnace, in which these poisonous gases are entirely consumed. It is to be hoped many will follow their example; indeed, in large towns there are many dangerous gases in the air, which the fiery jaws of a Siemens furnace might easily absorb.

The newest invention of Frederick Siemens is known as the regenerative gas-burner, one of the most important improvements in the system of illumination. The effect produced by this gas-burner approaches very nearly that of electric light. The Dresden Skating Rink, a very large enclosure without a roof, is at present brilliantly lighted by four of these regenerative gas-burners, which only consume gas equal to

* In his Presidential Address to this Institute he proposed the transmission of power by means of the electric current, and said that a 3-inch copper rod would transmit 1,000 horse-power a distance of thirty miles from a waterfall or other natural sources of energy. It was during his visit to the Falls of Niagara that this idea first suggested itself to his mind.

sixteen ordinary fantail gas-burners, and these would scarcely produce any effect in so large a space.

In the midst of colossal undertakings and responsibilities, the flight of genius seems to bear these inventors ever higher and higher in the regions of research, and with renewed energy they set themselves to solve new scientific problems. If their success in the future shall equal that in the past, the world has yet much to learn from them. It would be well-nigh impossible to reckon up all their services to technical science, and to the welfare and progress of the working classes, to whom their inventions open up new sources of industry. As Moses caused springs of refreshment to flow from the rock, so such minds create sources of usefulness and prosperity for all nations.

AUNT SUSAN.

A SHORT STORY. BY KATHARINE ROCHE.



"YOU'RE to go down to the railway station, sir, at once; there has been an accident upon the line."

Cutting short the enumeration of symptoms of a curious and unique disorder, concerning which its proud possessor, a cheerful old apple-woman, was at that moment consulting me, I hurried to the station, expecting to find there one of those scenes of destruction with which we of the present day are, at least by hearsay, unfortunately so familiar. On my arrival, however, I found the train standing whole and sound by the platform, while a little knot of railway officials and some few passengers were collected round the motionless figure of a girl of some fifteen or sixteen years of age, who lay on one of the benches in the dusty waiting-room. An elderly woman, apparently a respectable servant, stood by her side sobbing helplessly, while the officials were discussing the accident and its causes, and disputing as to where lay the blame.

"'Twas altogether her own fault," said the guard; "what business had she to be getting out of the train till it stopped?"

"The door ought to have been locked, Tom," said the station-master.

"So 'twas, sir, but she had a key of her own. I never see such a young lady. Didn't she offer Jim half-a-crown, while ago, to let her travel on the engine? She'll get no compensation anyhow."

"Compensation! it's fined she ought to be."

"Hush!" said the first speaker, "here's the doctor." And the little crowd, dividing, made way for me to pass.

My patient was a tall overgrown girl, with a freckled face, and a quantity of dark red hair, hanging in thick plaits over her shoulders; the mischievous cast of countenance, with its turned-up nose and wide mouth, forming a painful contrast to the death-like pallor which now overspread it. A short examination showed me that the case was not serious; a dislocated shoulder, and broken collar-bone, making up the sum of the girl's injuries. I turned to the servant, who had suspended her sobs and was watching me eagerly.

"Is there no one with her but you?" I asked.

"No one, sir. I'm sure I did my best to take care of her, but Miss Violet is one that will never be gainsaid by any one. Will she die, sir, do you think?"

"I think not. As far as I can judge at present, her injuries are but trifling. She must be taken to my house at once; I can deal with her better there than anywhere else. You had better go with the guard, and look for the young lady's luggage."

I spoke in a peremptory tone, taking the law into my own hands, as I saw that nothing either of help or suggestion was to be looked for from the woman in her present terrified condition. She went off submissively with the guard, and a few minutes later, a door having been taken off its hinges and covered with the dark blue cushions of one of the railway carriages, the injured girl was carefully conveyed to my house, and taken possession of by my sister Mary, who is never so happy as when she has a sick person under her really skilful care.

As soon as I had reduced the dislocation, and seen my patient comfortably settled in bed, I went in search of the maid, who had now recovered sufficient equanimity to be of some use. Telling her that she might go up and sit with her young mistress, I asked to whom I was to send news of the young lady's accident.

"I think you had better write to Miss Violet's aunt, sir," she said after a moment's consideration. "My master is ill at present, and a shock would be bad for him."

"Very well," I said, "will you kindly tell me the lady's name and address?"

"Miss Ferrars, Templearden Rectory, Carlingham."

"I suppose," I said as I pencilled the words in my note-book, "that Miss Violet's name is Ferrars also?"

"Yes, sir. Her father is the Rector of Carlingham; he is a great invalid, and his sister Miss Ferrars manages everything. He has been worse than usual



"THE CASE WAS NOT SERIOUS" (*p.* 467).



this time back, and Miss Ferrars has been so busy attending to him that she had no time to spare for Miss Violet, so she sent her on a visit to another aunt she has, a sister of her mother's living near London, little thinking what would be the end of it. I'm sure I never thought, when I saw her putting that railway key into her pocket, but that she was taking it back to her cousin, Mr. Tom, for 'twas he that forgot it after him last time he was at the Rectory. I hope you'll say when you write, sir, that the accident was altogether Miss Violet's own fault."

"I shall, at any rate, say that it was not yours," I answered; "I suppose that will be sufficient."

I wrote to Miss Ferrars by the evening post, making my letter as short and simple as I could. Fortunately there was in so doing no need to suppress or soften the truth, as Miss Violet's injuries were really only such as would be completely cured by time and care. I said to Miss Ferrars that if any of the young lady's friends wished to come to her, my sister and I would do our utmost to make them welcome; but should they not find it convenient to do so, they might rely upon our taking every care of the patient.

Next day Miss Violet was much better, and able to give warm thanks, somewhat brusquely expressed, to Mary and me for our hospitality. My first idea as to the expression of her face proved correct; I never before, or since, saw so much mischievous fun concentrated in a single countenance. And this bright expression was the one thing which redeemed her from absolute plainness, since she had not a good feature in her face; her grey eyes even being small and fringed with sandy lashes. She made no secret of her vexation at the accident, while fully admitting that it had been caused by her own carelessness.

"It is such a shame," she said; "I was looking forward to a pleasant time at Aunt Margaret's. It is a jolly house to stay at, and I am very seldom allowed to go there. Papa and Aunt Susan have some prejudice against my cousins: I believe they consider them fast. If so, fastness is a thing to be both admired and imitated. My cousins are the prettiest and nicest girls I ever saw. As Shaw says, it would be well for me to be like them."

"I suppose your aunt is very particular?" said Mary.

"In some ways, very; yet she allows me to do things which Mrs. Thorpe, at the Manor, would *die* rather than see *her* daughters guilty of."

"What sort of things?" I asked, as I recovered from the laugh into which Miss Violet's momentary imitation of a virtuous matron had thrown me.

"I shan't tell; it may be easy to shock Miss Ellison."

As I knew that it was very easy to shock Miss Ellison, I did not press the subject, but went on to tell Violet of the letter I had written to her aunt, and the invitation contained therein.

"She will not come," said Violet decidedly. "My father could not possibly spare her. He has been very ill lately, and no one understands his ways but Aunt Susan. She will be fretting about me though; I wish I could write just one line to tell her what good care Miss Ellison takes of me. I must be an awful nuisance both to you and to her."

"Do not imagine such a thing for a moment. My sister likes nothing better than the care of a sick

person ; in fact, it is her true vocation. I will write again to your aunt and tell her, from you, that you are content with your quarters here, and that you mean to get well as fast as possible. Will that do ?"

"Thank you," she answered ; "are you certain that I shall get well ?"

"As certain as I can be of anything in this world. You surely did not imagine that your accident was a serious one ?"

"Well, I did hope that it was of some little consequence ; it is too bad to have all the pain and none of the *prestige* of a railway accident."

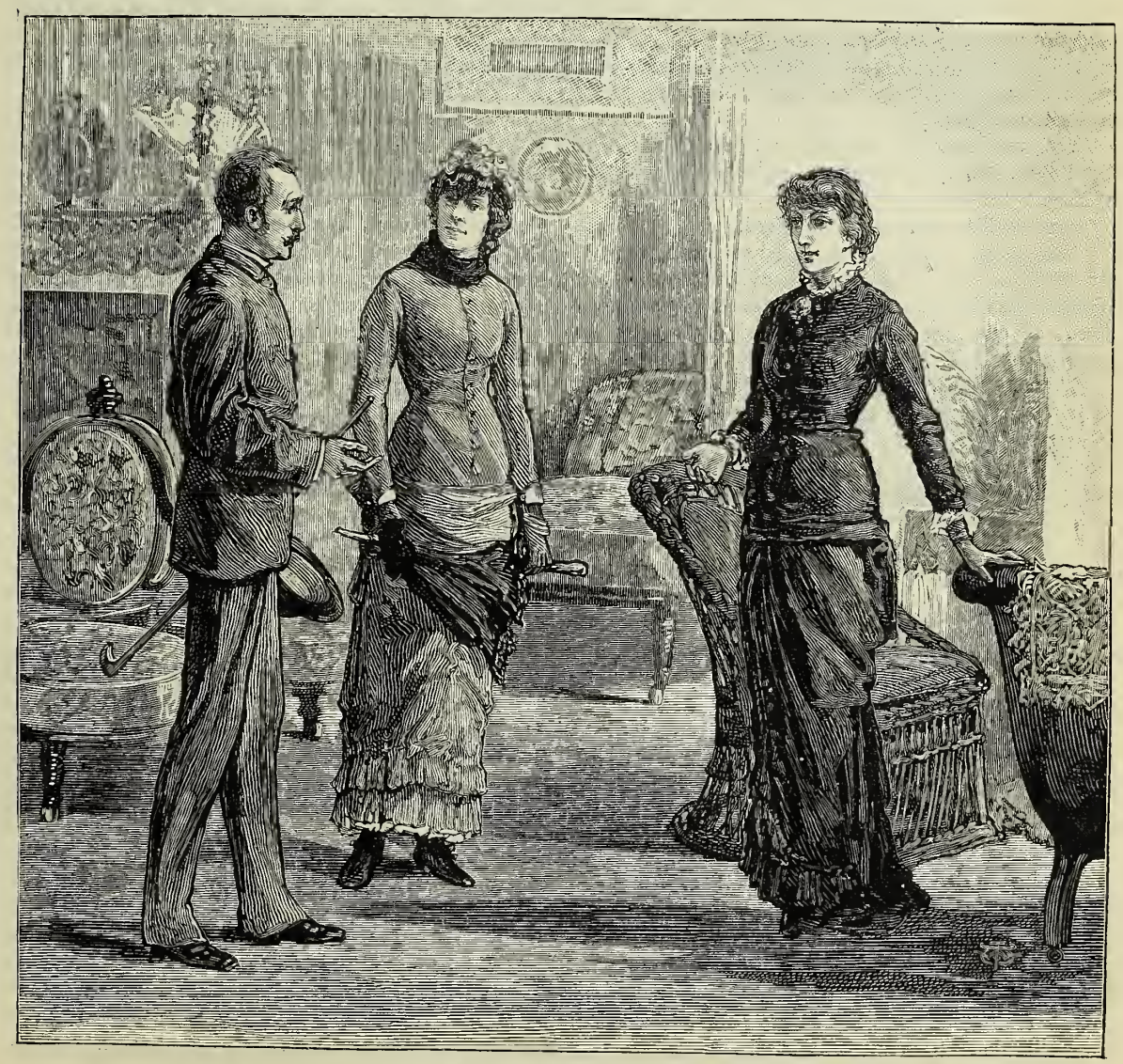
"There is nothing to be proud of in an accident caused by one's own carelessness," said my sister severely.

"Well," said Violet, "I certainly would rather suffer from my own carelessness than from any one else's. I never bear malice towards myself."

Aunt Susan's letter came in due time. As Violet had predicted, Miss Ferrars declined our invitation, saying that it would be impossible for her to leave her brother, who was recovering from a severe illness, but that she felt no hesitation in trusting her niece to us, having heard much of my very great skill in surgical cases.

This latter sentence somewhat bewildered me. Could it be possible, I asked myself, that Miss Ferrars had heard of that successful operation performed by me in the County Infirmary ? It certainly had been mentioned in some of the medical journals, but then medical journals are not exactly the sort of literature one expects to find in a country parsonage. Any way it was gratifying to be thus appreciated. Strange to say, the obvious explanation—that Miss Ferrars was mistaking me for my uncle, whose namesake and successor I was, and who had been a man of undoubted ability and a certain local reputation—never once occurred to me.

A letter had also come, directed in the same handwriting to Miss Violet, to whom I sent it up. On



"'I BEG YOUR PARDON,' SAID THE GIRL" (*p.* 471).

going a little later to pay her my professional visit, I found her still reading and laughing over it.

"You seem to have had an amusing letter," I said.

"Aunt Susan's letters generally are amusing," answered Violet, "but this is so from an unusual cause—a mistake on her part. I cannot explain it to you, but it is very funny."

Perceiving that the mistake was in some way connected with myself, I asked no further questions, and to change the subject I took up the cover of Miss Ferrars' letter, which lay upon the bed.

"What a very fine hand your aunt writes!" I said.

"She does everything well that she undertakes, and she undertakes a great many things. She is papa's right hand—as good as another curate, he says. She plays the organ and trains the choir at church, and she teaches me."

"You consider yourself a decided success then, Miss Violet?"

"You need not laugh," she said in a dignified tone. "You think that, because I am ugly and awkward, I am ignorant also; but I am not. I took a high place at the Cambridge Local Examinations last year, because I was well prepared. Aunt Susan has a real genius for teaching."

There was evidently nothing of personal vanity in this boast, the object of which was solely to exalt her teacher.

"Are you like your aunt?" I asked.

"Not a bit. I wish I were. I am a caricature of my mother, who died when I was six years old. Would you like to see Aunt Susan's photograph? Shaw, will you find my little tin box? it's somewhere in my trunk, I think."

"I know where it is, miss, seeing that 'twas I packed it. 'Tis well that you've somebody that knows where your things are, Miss Violet."

Mrs. Shaw brought the box—a small tin one, filled with a regular schoolboy collection of odds and ends, which had to be removed before the photograph could be found.

"I wonder," said I, as I stood awaiting the conclusion of this process, "if the educational system of the present day, with all its advantages, will produce many women as really able and cultivated as some of those who belong to a former generation—women like your aunt, for instance."

Violet, who had by this time found the bundle of photographs, paused with it in her hand, and gave me a quick inquiring look. Then, selecting one of the photographs, she handed it to me.

"That is my aunt," she said.

The photograph was that of a very sweet-looking elderly lady, with snow-white hair and many wrinkles, but in whose bright eyes, and softly curving lips, much of the joyousness of youth still seemed to linger. She wore a mob-cap of lace and muslin, with a large handkerchief of the same materials over her shoulders—a costume which made her look like the original that our modern coquettes try to copy.

"What a charming old lady!" I exclaimed.

"Well," said Miss Violet, with an odd sound in her voice, "Aunt Susan is not generally considered so."

"I am surprised at that," I said; "I have seldom seen so sweet a face. I suppose that, although you call her aunt, she is in reality your great-aunt?"

"No," answered Violet, "she is my father's half-sister. But there is a difference of twenty-five years between them. You may keep that photograph if you like. I have another copy."

My opinion that Miss Violet's injuries were not of a serious nature proved to be correct. She mended rapidly, and was soon able to lie on the sofa in the drawing-room, devouring every book within reach, and showing considerable appreciation of Mary's efforts at invalid cookery.

Mary and I soon became very fond of our guest, although we agreed that we would rather take charge of her in sickness than in health. She soon got over her dread of shocking Miss Ellison, and succeeded in doing so pretty effectually. I could not help laughing at the descriptions of some of her pranks, and I tried to make Mary see that, with all her unconventional ways, she never showed any want of refinement. She was very clever, and a great credit to her aunt's teaching, being well and solidly grounded.

Violet kept very faithfully her promise of writing to Mary, nor did I allow my correspondence with Miss Ferrars to drop; it was seldom difficult to find a pretext for a letter; one led to another, and we were soon writing, each to the other, as to an old friend. Each step towards intimacy served but to deepen the impression made upon me by Violet's description of her aunt. It was curious what a hold had been taken upon my imagination by this woman whom I had never seen, and who, if she were five-and-twenty years older than Violet's father, must have been almost, if not quite, contemporary with my grandmother. I had even constructed a little romance about her. No one who saw her photograph could doubt that she had been singularly beautiful, and I decided that in early youth she had lost her lover by death, and had remained faithful to his memory ever since. "A lucky fellow he must have been," thought I to myself, as the face of the photograph in the guise it must have worn some forty or fifty years before rose up in my mind. "What a donkey I am, to be sure! Here am I making a fool of myself about a woman who must have been past her youth when I was born. I must try to fall in love with some one by way of an antidote." But, somehow, none of the girls whom I was in the habit of meeting were fair enough or wise enough to put the ideal Susan Ferrars from my thoughts.

About a year after I had thus come into contact with the Ferrars family, business took me to within a few miles of Carlingham, and I determined to profit by this opportunity of seeing both my unknown correspondent and my former patient. As I walked up the hill from the railway station I was overtaken by Miss Violet—something taller than she had been last year, and every bit as unconventional. Just as friendly and affectionate also, for she seemed really

glad to see me, and insisted on my going straight to the Rectory, to be introduced to her father and aunt. We passed across a green lawn surrounded by some fine old lime-trees, through a glass door into a matted hall, and thence into a pretty drawing-room, cool, shady, and flower-scented.

"Here is Dr. Ellison, Aunt Susan," called out Violet as we entered.

I looked across the room, expecting to see my ideal old lady, but the person who came forward to meet me, uttering some cordial words of welcome, was quite young, almost a girl in fact, being certainly under five-and-twenty; tall, slender, and dark-haired, and bearing a curious resemblance to my mental picture of Aunt Susan in her youth.

She paused suddenly on coming near me, half withdrawing her outstretched hand.

"I thought you said Dr. Ellison, Violet."

"So I did," said Violet. "This is Dr. Ellison."

"I beg your pardon," said the girl, recovering herself, "I was under a wrong impression with regard to you. I am very glad to have the pleasure of making your acquaintance," and she motioned me to a seat opposite to the low wicker chair from which she herself had risen.

"Will you look for your father, Violet?" she said, after a few minutes. "He will be delighted to see Dr. Ellison."

"And Miss Ferrars—am I not to have the pleasure of seeing her?" I asked.

"I am Miss Ferrars," said the girl, laughing.

"I mean the elder Miss Ferrars—Violet's Aunt Susan."

"But this is Aunt Susan," said Violet.

"This Aunt Susan! But your Aunt Susan is an old lady!"

"Is she? I wasn't aware of that."

"But you gave me her photograph," I persisted. "I have it still—a charming old lady in a mob-cap."

"I remember," said Violet suddenly, "I did go in for a bit of mystification. You said in your letter to me, Aunt Susan, that you had often heard your mother speak of Dr. Ellison, who was such a kind, courteous old gentleman, and such a clever doctor. While I was reading the letter, in came Dr. Ellison, looking about as venerable as he does at present. In speaking of you, he said something which showed me that he on his part imagined you to be on the other side of ninety; so, just for fun, I showed him that photograph of you, dressed for the acting charades at the Manor. I did not intend to carry the thing far, but I forgot all about it; and Dr. Ellison appears to have recognised in you his ideal great-grandmother, and revered you accordingly."

"That explains," said Miss Ferrars, laughing, "the deferential tone of Dr. Ellison's letters. I thought it proceeded from the chivalrous courtesy of a gentleman of the old school, whereas it seems merely to have been respect for grey hairs."

"But," said I, still bewildered, "you told me that your aunt was twenty-five years older than your father."

"I beg your pardon; I may perhaps have told you that there was twenty-five years' difference between them, as there is, my father being the elder. By the way, I suppose you also, Aunt Susan, continued all this time under a similar delusion?"

"I did," said Aunt Susan, laughing and blushing. "As I told you, I often heard my mother speak of Dr. Ellison of Calethorpe, and it never occurred to me that your friend could be other than the same. You know, you never gave any more definite description of him than that he was a 'regular brick.' It seems to have been a game at cross-purposes altogether."

The consequences of this game at cross-purposes, with regard to my feelings, may easily be guessed. But that those feelings, true and deep though they were, should have been returned by Susan Ferrars, is a mystery at which I can only marvel in heart-felt gratitude to the Providence which thus blessed me so far beyond my deserts.

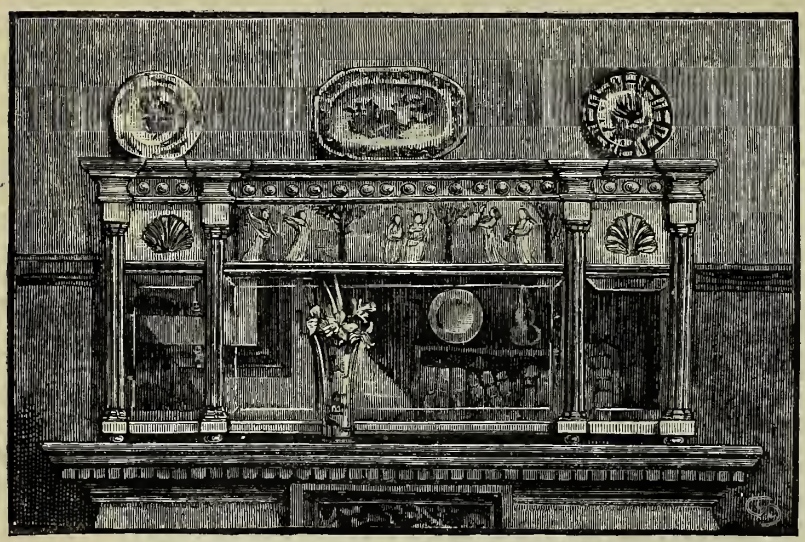


ARTISTIC FURNISHING FOR MODERN HOUSES.

THE DRAWING-ROOM.

THIS, the room of all others upon which the best available taste of the household is commonly lavished, has been, singularly enough, that in which the most signal offences against æsthetic propriety have been usually committed. In other sections of the house, utility and convenience have to some extent dictated the forms and materials of the furniture and accessories, and the absence of any overwhelming inducement to display has very often resulted in an effect, if not positively admirable, yet not intrusively vicious.

It is far otherwise with the drawing-room; here, where the afternoon callers are received in state, and friends and acquaintances are gathered together in the evenings—here, at all events, if nowhere else in the house, the visitor *must* be impressed with the taste or the wealth of the hostess. Hence the drawing-room has, perhaps, been decorated, furnished, and tricked out with the sole motive of display. What matter if the chairs were too fragile to sit upon with a sense of security, or the sofa impossible to lounge on at ease? so that the woodwork was rich with carving and

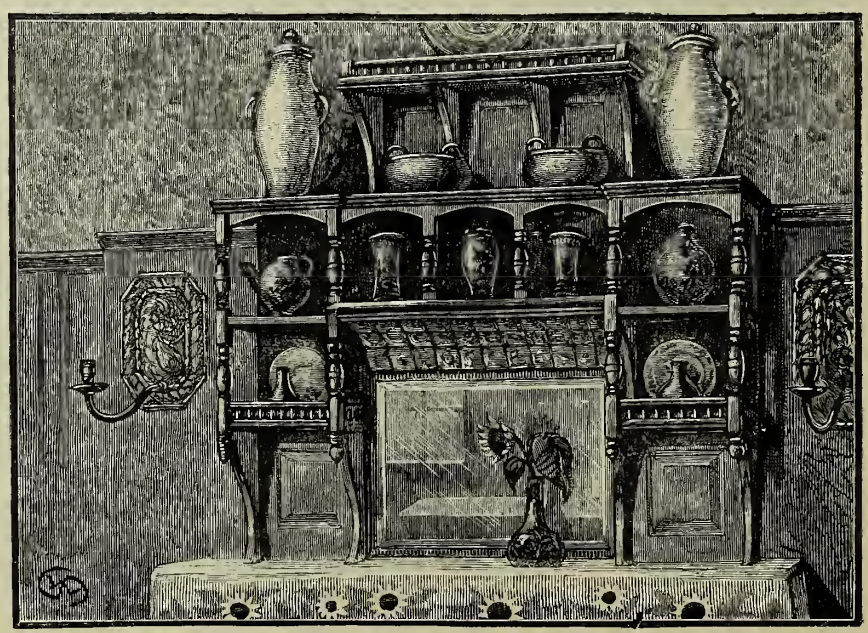


AN OLD-FASHIONED CHIMNEY-GLASS.

lustrous with polish, and the coverings were blue satin, all was well. What matter that the room was blazing with light from three or four large plate-glass windows? the paper must still be white and gold, or another of the special drawing-room papers. If we happened to be the fortunate possessors of a few good oil paintings, they must be relegated either to the staircase or the dining-room, oil paintings in a drawing-room being ridiculous; washy chromos, or at best an Art Union engraving, being the only works of art allowable for the adornment of the walls. While in the dining-room a Turkey carpet, if sufficiently new and bright in colour, was permitted, up-stairs the best Brussels, Axminster, or velvet-pile, according to the means at command, and of the newest procurable pattern, were our only floor coverings. In short, it may be safely asserted that such rooms as we are now referring to would have been impossible if they had been designed for real occupation, and were not merely show-rooms by which we, perhaps unconsciously, hoped to impress an occasional visitor with an adequate idea of our wealth or exalted position.

It may be said that now, so many of these faults having been amended, it is but stabbing a dying enemy to ungraciously recapitulate them. But although it is true that the most glaring of these sins against taste have been or are being amended, so long as the underlying principle (*i.e.*, the bedecking of the drawing-room solely with the view of display) against which we are contending remains in force, the improvement is but superficial. Granted that Oriental carpets, well-designed furniture, quiet and harmonious wall decoration and draperies have taken the place of the monstrosities of the immediate past, so long as the dominant motive of the appointments of the drawing-room remains *display* we are certain only to exchange one evil for another. The particular evil at present observable will be referred to farther on, in the meanwhile we have to consider the rational treatment of the drawing-room considered from an artistic point of view.

In the first place, while, as in a previous paper, we have submitted that the effect of the dining-room should be expressive of *comfort*, undoubtedly for the drawing-room the corresponding influence should be *cheerfulness*. A gloomy, or even a grand drawing-room, I hold to be a social mistake. But cheerfulness is not synonymous with glitter and sparkle, nor is it to be secured by the free use of light and untoned colours. On the contrary, gradation and repose are more than elsewhere necessary in a room devoted to conversation, music, and other relaxations. At the same time, a somewhat sumptuous character naturally and properly belongs to the room above all others in the house devoted to the amenities of social life. Work-rooms, eating-rooms, and sleeping-rooms have all more or less distinctive characters determined

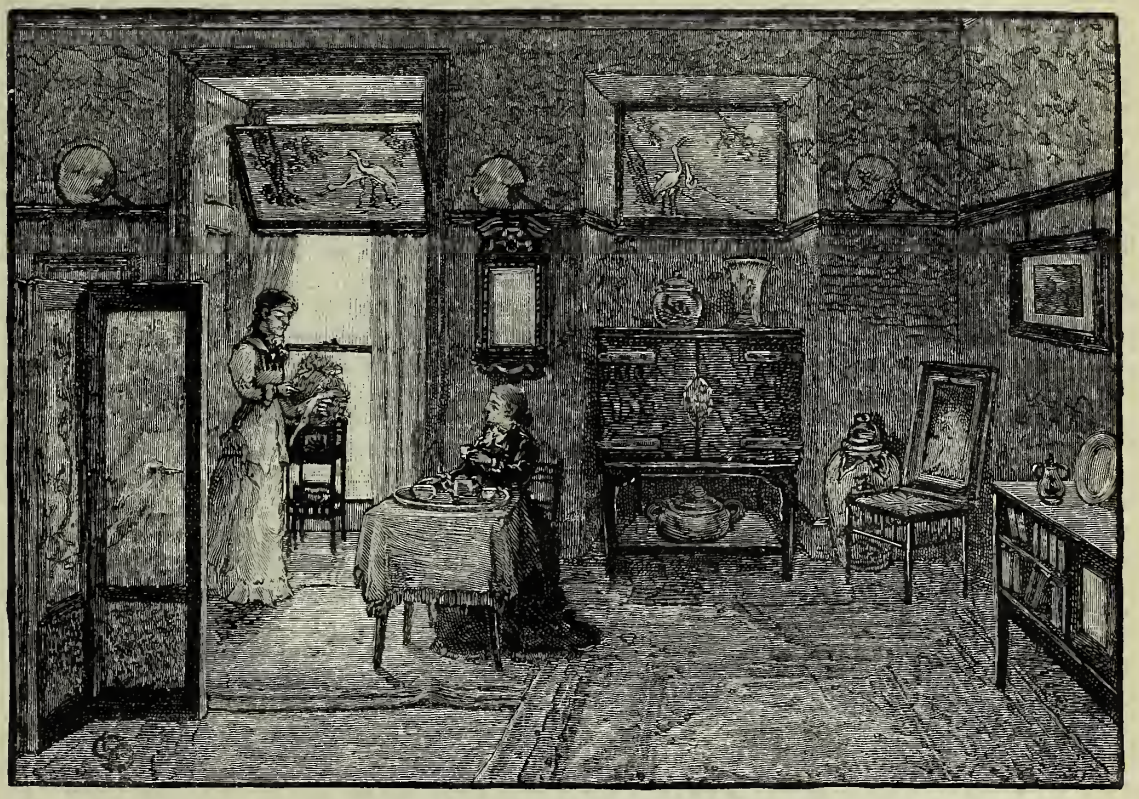


DRAWING-ROOM OVER-MANTEL.

by their several uses. Rooms devoted to social recreation, such as is the drawing-room *par excellence*, to be occupied when, our minds freed from the anxieties of daily business, and our bodies restored by necessary food, we are at leisure to enjoy the hours yet intervening before bed-time, should have no less than others an *ensemble* appropriate to them alone.

As some general hints have been given in the previous papers on this subject on the treatment of ceilings, walls, and furniture, we need here only glance cursorily through these items with a special reference to the drawing-room. Commencing with the ceiling, this position, but boldly decorative plates or dishes will look well arranged on a shelf over the architrave of the doors. For the lower part of the walls silken hangings, woollens, or even cretonnes may be used with fine effect, but will scarcely be often conveniently within the means, or very appropriate for the ordinary middle-class homes we are now considering.

On the walls, about the level of the eye, a few pictures will form welcome points of interest. These should be dependent for their support upon stout cords, thick enough to be quite conspicuously visible, and secured to hooks or nails in the surbase mould-



DRAWING-ROOM—TREATMENT OF WINDOWS.

we will suppose the centre flower, if there be one hacked off, and the flat surface of the ceiling papered with a small-patterned paper of light drab, buff, or duck's-egg green tint. The walls are, perhaps, best divided, horizontally, by a moulding ranging about the height of the architraves of the doors. The upper part of the wall thus forms a sort of frieze about three feet deep, and may be hung with a paper of rather "busy" pattern, not obtrusive in colour, but well covered, and containing several shades of various colours. Below the moulding a much quieter paper of darker tone is most appropriate, as its function is to play the part of a background to furniture and pictures. On the frieze part no pictures should of course be hung, but the unbroken surface above the line of moulding may be varied with a few choice Japanese fans. China, a fragile ware, is scarcely suitable for ing. These pictures may be oil or water, etchings, or photographs; but it is as well, if possible, not to mingle them on one wall, as they are apt to mutually impair their effect. The great thing is to avoid giving a crowded or picture-gallery-like appearance to the walls, so that they should not be too numerous. One or two at most should be hung on each wall, and ample intermediate wall-space should be left between them.

It requires the nicest eye to hang pictures really well, so to arrange the interspaces that each picture shall be thoroughly isolated, and yet no undue space of blank wall surface obtrude itself. It is a good plan to have the surbase moulding grooved on its top surface, so that the picture-cords may be hung upon hooks which, resting in the groove, can slide freely along and permit of easy re-adjustment.

Over the mantel-shelf in place of the now, happily, nearly obsolete vacuous sheet of plate-glass in gilt frame, an over-mantel, such as is shown in our first illustration, will be a useful and appropriate piece of furniture, more especially convenient for those who have a great deal of china to display. A quieter effect would be produced by one of the old-fashioned glasses shown in the second cut. These are very suitable for small and low rooms, especially if a considerable part of the other furniture consists of old-fashioned mahogany. The top cornice may be utilised to stand a dish or plate upon, and the frieze part painted with a decorative subject, such as appears suggested in the wood-cut.

Concerning the windows, there is little that can be done to improve them without structural alterations, which it is beyond our present province to enter upon. If, however, as is not unfrequently the case, the room is over-lighted, a suggestion may be offered of an inexpensive and effective improvement. This is to have a frame made exactly the size of the window between the beads, cover it with holland, and after screwing up the window-sashes, and papering over the cracks, so as to thoroughly exclude all dirt and dust, fix the frame so that from the outside it looks like a white blind drawn down. On the inside stout canvas must be stretched, and the papering of the lower part of the wall carried round over the shutters, if any, and the surbase moulding should also be carried round. Above the surbase fix in a black frame a decorative subject painted as a transparency. This may be copied from one of the Japanese silk pictures or embroideries. In the recess thus formed an old cabinet may stand, and the effect of the whole will be quaint and pleasing. The rays of the sun coming softly through the double thickness will shed a "dim religious light," very grateful to the artistic eye. Our third illustration shows somewhat the sort of arrangement suggested. If there be an otherwise insuperable objection to this idea, only on the score of the impossibility of cleaning the windows, washing the blind, and so forth, the frame may be fastened to the bead on one side by hinges, and a button or catch on the other, so that it can be periodically opened.

In the illustration it will be noticed that the next window is also treated somewhat unusually. For summer time no large or heavy curtains are necessary, and to obviate the draught which pours down on our heads when the window is open at the top, a frame with transparency is proposed, similar to that used for the blocked-up window, but fitted on pins which enter the beads at the sides, so that it can be opened inwards as shown. By this means sufficient air will be admitted, but the draught will be directed upwards to the ceiling and there dispersed. Below the frame small soft curtains of yellowish colour are hung from a slight brass rod. With these curtains, which can be wholly or partially drawn at will, no roller or Venetian blinds are necessary. If the window faces the south we suppose that outside blinds or jalousies are used. In winter, soft warm curtains of one or other of the many excellent figured or plain materials now purchasable will be hung in the usual way above the architrave of the windows. A thin pole, either of brass or black wood, with small turned ends, is the best supporting apparatus. The poles usually employed are generally far too thick and clumsy, and any sort of hanging ends of stamped brass, representing leaves, bunches of grapes, or what not, are unmeaning and offensive. Against the whilom universal muslin or lace curtains, stiffened with starch, and of a dead white, it is scarcely necessary to declaim now-a-days.

Respecting the style of the furniture proper, it may be sufficient to remark that provided comfort, utility, and a certain suggestion of sumptuousness are secured, we cannot go far wrong. For the chairs and small tables it is as well to choose examples light enough to be easily movable, but not so light as to be readily knocked over. The piano is usually a sore subject with artistic furnishers. Unless specially made to design, a condition usually wholly unattainable with people of moderate incomes, the form of it, whether grand or cottage, is very unsatisfactory. If it be a cottage, something may be done by removing the elaborate fret-work in front, and fixing in its place a fine piece of needlework, or a decorative painting in silk. It is sometimes convenient to arrange the piano out in the room, so that its back is exposed to view. In this case this unsightly part can be concealed by a piece of the newly-introduced painted tapestry, or by needlework, if the latter be more accessible ; or, failing either, a piece of patterned stuff may be stretched over the surface.

Screens are very valuable in some rooms, whether they be the dwarf fire-screens or the tall folding ones, and may be made really decorative objects. Some of the Japanese examples sold at the Oriental warehouses are very good and not prohibitive in price. A cheaper substitute may be produced by getting an old screen, such as may often be bought for a few shillings, and pasting on the right side of the leaves some Japanese paper pictures of birds and flowers, which are cheap, and, as far as they are carried, good art. It may seem curious to some to note how often, for purely decorative purposes, we have to fall back on the Oriental work ; but the truth is, there is very little European work of low price at all satisfactory in the purely decorative sense. The back and margins of our screen may be covered with cretonne, or even wall-paper. Everything depends upon the selection of the colours and patterns.

The particular evil to which we adverted in the opening of this paper, as being rife even now, consists in the too common practice of over-crowding our drawing-room with objects, unexceptionable it may be in themselves, such as china, glass, pictures, and furniture. Probably from pure want of considering the matter, many people in furnishing their drawing-rooms appear to have come to the conclusion that it is impossible to have too much of a good thing. Whenever the room begins to present any approach to a museum-like appearance, whenever the walls are

becoming covered with pictures, or pieces of china meet our gaze at every turn, it is quite time to make a clearance. The room may be an excellent show-room, or museum, but as a room dedicated to the uses for which a drawing-room is pre-eminently required, it is a failure.

The doctrine of value, as applied to decoration, is simple enough. In order to appreciate properly any given object, it must be separated from others by what may be termed a neutral zone. For instance, we all know the charming effect of a single old Nankin vase, if it be deftly placed on a shelf or table, in a position wherein the eye is not distracted by other objects, whether similar or competing with it in vividness or force of effect. But fill a whole shelf with such objects in close array, as in a china shop, and it will be found impossible to realise the actual decorative and artistic value of any one of them without removing it, and thereby artificially isolating it from its rivals in attractiveness. Of course it is to be understood that a *pair*, or a group of even three or five pieces intended to form a set, count only as one in this proposition, as they have been specially designed with the view of their combined effect. A piece of jade, brasswork, Satsuma, soapstone, bronze, or any other object differing largely in colour and texture will not, however, injuriously affect the proper appreciation of the Nankin. So much for the effect of over-crowding on the objects shown. In considering its effect on the *ensemble* of the room it is still more to be deprecated. A well-furnished and decorated room should present on all sides such an harmonious arrangement of colours and lines as would be pleasing and delightful in a picture. Now any artist will tell us that it is impossible to obtain that repose and harmony without a quality which is called breadth ; the eye must not be distracted by a multiplicity of objects of nearly equal intensity in various parts of the picture, but should be led gradually on from one beautiful detail to another in easy succession ; and especially that repose—that most valuable quality in art—is to be obtained only by broad and simple lines and masses.

Those, therefore, who are the happy possessors of a large collection of any sort of objects of *vertu* will do well, if they wish their treasures to receive their due meed of appreciation, to exhibit them somewhat sparsely, distributing them cunningly in little groups in different parts of the room. The surplus articles would then be kept in store-rooms or closed cabinets, and the exhibited collection varied from time to time with selections from the reserve, so that something fresh is always on view. So with engravings ; the bulk of them might be well kept in portfolios, and a few only framed and hung on the walls. There is room for contrivance in designing a frame so as to avoid the necessity of pasting the backs over with strips of brown paper ; one frame would then serve for several prints of the same size, and a fresh interest given to the walls at each re-arrangement.

C. W. Dempsey.

OUR COTTAGE GARDENING SOCIETY.

THE village was astir at an early hour on Tuesday, July 27th, for it was the day of the Flower Show, and the members of the Cottage Gardening Society had to get their flowers, fruit, and vegetables ready for exhibition. The previous day had been cloudy, and the night very wet, and many a girl looked out anxiously that morning, to see whether it would be fine enough for her to wear her new dress or hat. The sky was clear, and as the sun rose higher in the heavens, the steaming earth began to dry. The flowers that had made the cottage windows so gay for a month past, were being removed by eager hands, and carried out to the street, where here and there donkey-carts stood ready to receive them.

Mary Jamison had been up at three o'clock, while it was still raining heavily, to make some pea-soup, for the Secretary of the Society offered prizes to any member who should make soup and bring it to the show to be judged. Mary had attended the cooking-lesson three weeks before, had watched every step of the process, and had since then made the soup for her family, so she hoped to succeed in winning a good prize. But the pea-soup required three hours to make, and therefore she had had to take time by the forelock and get up early, as she wished to be present in the tent at the placing of her flowers. Eight o'clock was approaching, and her double scarlet geraniums, the delight of her eyes, must be carried out to the cart, and put beside her rival's dark pelargonium.

Annie Kearney was her rival and next-door neighbour, who had gained first prize for clean house and well-stocked garden on two former occasions. Mary feared she would do so this year also ; but surely, she

thought, her own house had been as clean as soap and water and white-wash could make it, when the judges visited it three weeks before. Her garden, too, had certainly improved since last year, and every spot in it was filled with some useful vegetable or gay flower. But when she saw Annie Kearney's beautiful pelargonium, and her bunches of carrots, parsley, thyme, and mint, her heart sank, and she felt a jealous pang.

"Wait a wee minute, Joe, till I get digging my potatoes," she cried to the boy who was standing at the donkey's head.

"You needna be hurrying yoursel', Mary," he replied, "for James Neely and Ned Gourlay has to bring their flowers yet."

Thus comforted, Mary drew breath, and ran out to her garden once more. It was a long, narrow strip of ground, sloping down from the back of her house to the river, a narrow branch of the Foyle, that flowed between wooded banks fringed with meadow-sweet, willow-herb, and forget-me-not. As Mary dug her potatoes, glancing with fond pride over her little domain made tidy and productive by her own industry, her jealous feelings subsided, and she almost wished that Annie Kearney might win prizes—*good* prizes, but not the best.

"I say, Mary, will I tak' my peas and beans to the show?" asked little James Neely, the lame boy, speaking across the hedge.

"Would you allow (*i.e.*, advise) me to show my onions, James?" called Ned Gourlay at the same moment from the further garden.

Mary left off digging, and went to her boundary, and Ned advanced to his, and an earnest conclave was held.

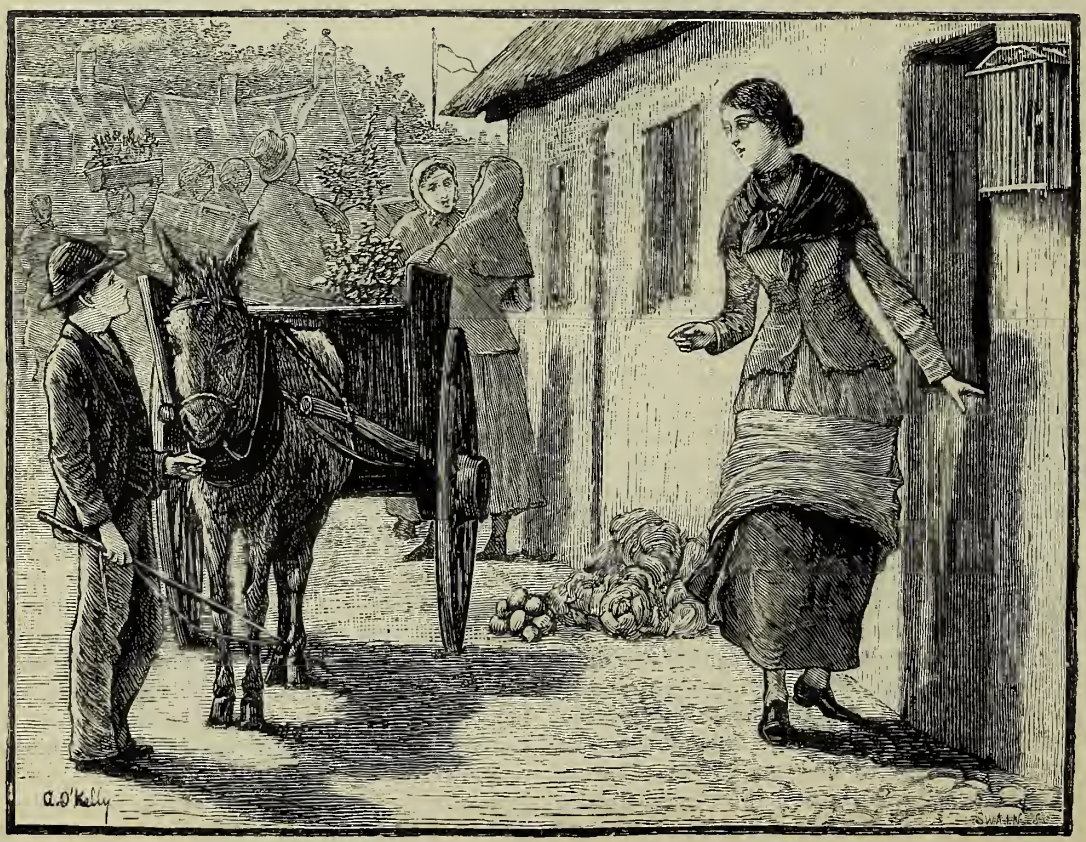
Mary, as the eldest and hitherto most successful of the three, gave her opinion.

"Ay, you'll tak' peas an' beans an' onions, both of you. You made Miss M—— put them down in her list, so you canna draw them back, an' who knows what'll win a prize?"

"Hurry!" cried Annie Kearney from her garden, "there's Miss M—— away to the field."

Miss M——, the Secretary, glanced with approval at the flowers, which were being carried along the street. One man was staggering under the weight of a gigantic fuchsia, covered thickly with pale rose-coloured bells. He had come from a village at the furthest end of the parish. His hopes of a first prize were great, and he would not imperil them by trusting his fuchsia to any other hand. A bright crimson flag floated from the mill-corner, another waved at the head of the village, where the high-road turned off from the village towards the field of the show; and gay flags of yellow, white, and red marked the way at intervals.

Two tents were erected in the field, one for flowers in pots and boxes, the other for cut flowers—glasses of garden flowers, and bouquets of wild flowers grown in the parish.



"WAIT A WEE MINUTE, JOE, TILL I GET DIGGING MY POTATOES."



"PLEASE, MISS, HENRY GILDEA SEEN A BOY TAKING HIS GOOSEBERRIES."

The Secretary smiled as she took a bouquet of wild flowers, almost as large as the child who carried it.

"Who would think there was such a variety of wild flowers in Donegal? Did you gather them all yourself, Biddy?"

"Ay, miss, me an' Jim."

"Is your number fastened to it?"

"Ay, daddy wrote it an' tied it on."

The Society consisted of thirty or forty honorary members, chiefly substantial farmers in the neighbourhood, who contributed five shillings each to the fund for providing prizes; and sixty members, each of whom had paid a shilling for his ticket. Thirty-seven of these shilling members had competed for the prizes offered for clean houses and well-stocked gardens; and a card with the numbers of the prize-winners, and amount of their prizes, would be fastened to the outside of the tent, at two o'clock, when the doors were to be thrown open to the public.

The larger tent was being filled with flowers—geraniums, pink, white, and scarlet, pelargoniums, fuchsias, dark and light, pots of mignonette, musk, and nasturtiums; and three or four carts had already discharged their burdens in the field. Saucers of strawberries, currants, raspberries, gooseberries, and early apples which would not have disgraced Covent Garden, were arranged on a low platform in the open field. Near them were placed fine potatoes, turnips, carrots, peas, beans, lettuce, rhubarb, cabbages, parsley, mint, and thyme, each group or bundle with the exhibitor's number firmly attached to it.

Collections of annuals, tasteful and pretty nosegays of garden flowers, and children's bunches of wild flowers were arriving every moment, and the Secretary was placing them to the best of her ability in the smaller tent, when a messenger accosted her.

"Please, miss, Henry Gildea seen a boy taking his gooseberries."

"Do you know which boy took them?" asked the harassed Secretary, hastening to the platform, now surrounded by a crowd of members and their friends, who were arranging their fruit and vegetables.

"Ay, miss, I know him rightly."

"Very well, tell me his name," glancing sternly at a group of urchins who were tying to shrink out of sight, "and I shall complain to his parents."

Henry Gildea hesitated, looking uncomfortable.

"I'd sooner not say anything. I'd be feared of getting ill-will if I'd speak," he replied at length.

"Please, Miss M——," whispered a man, "there's

many could certify that Maurice McBride's big fuchsia is na his own."

"Who says so?"

"Oh, I will na just say; but plenty says it was brung to his house last night from Colonel F——'s greenhouse."

"Will you lodge a complaint against McBride then? and I shall draw the judges' attention to it."

The informant shuffled. No, he would not confront McBride, he was afraid of gaining ill-will.

Miss M—— spoke to the wind. Her efforts to inculcate a little courage were all in vain. The words "there's plenty could certify it," were once more followed by "but *I* won't speak, for fear of getting ill-will."

The lady and gentleman who had kindly undertaken the arduous task of judging now arrived, and their eyes were at once attracted by the beautiful fuchsia, the most prominent object in the tent.

"Can this plant possibly have been grown in any cottage window?" they asked.

One of the judges had visited the cottages and gardens three weeks previously, and to him the Secretary applied: "Has McBride a frame in his garden?"

"No."

"Has he a window large enough to have grown this plant?"

"No."

"See how beautifully it is trained, and how the flowers hang all round the plant. It is impossible that it could have been grown anywhere but in a greenhouse."

"What do you say to this pelargonium?" said another of the judges, displaying a grape which he had found on the pot under the leaves.

"Come," cried the others, "we know where that has been!"

Both fuchsia and pelargonium were marked "disqualified," and they moved on. The Secretary followed rather sorrowfully. She grieved that two of her members should have been found to have behaved dishonestly, but gradually cheered up as she saw that no doubt was thrown upon the uprightness of the remaining fifty-eight.

Mary Jamison's double geranium won first prize—so did Annie Kearney's pelargonium, and Ned Gourlay and James Neely took several second and third prizes. Before the judging was concluded each member had won at least one prize, and most of the members had won several; but as no member could get more than three prizes at each show many second and third prizes had to be struck off, the winner being allowed to retain his three highest prizes.

The hour for judging the soup arrived, and fourteen women members, who were to compete for the Secretary's prizes, were found by the judges seated on a bench near the larger tent, each holding a little jug carefully wrapped up in a cloth. Much interest being excited by this competition—a novelty in the proceedings—all the members of the Society crowded round the tent to see the competitors, headed by Mary Jamison and Annie Kearney, set down their jugs in a row upon the shelf that had been cleared for them. But neither soup-makers nor public were permitted to be present at the judging.

"You'll gie *me* a gude prize, miss, dear?" whispered one of the women.

"But I have nothing to say to it, Nancy," replied Miss M—— in the same tone. "I am your teacher, so it would never do for me to be your judge."

"Well, miss, I hope I'll get as gude a prize as my neighbour."

"The judging will be quite fair, Nancy, I can promise that. Is your number pasted on your jug? Yes, I see it is. You must leave us now, and the judging will begin."

Nancy left the tent reluctantly, followed by her neighbour and rival, a neat-looking, middle-aged woman. The two younger rivals, Mary and Annie, had brought sippets of toast, a refinement unthought of by the rest.

The pea-soup, flavoured with bacon, and thickened with onions boiled until they were as tender as marrow, was pronounced excellent—so good that the judges found it difficult to decide upon the relative merits of the fourteen jugfuls; but five were a little the best, and received the Secretary's prizes; the remaining nine received each a shilling as consolation prize.

The judging being now over, the field was cleared of members and their friends, the band arrived, and a table and chair were brought from the village for the accommodation of the ticket-receiver at the gate. As the parish is situated within the County Donegal where it borders upon Londonderry, visitors from both counties came in crowds. It was a gay scene. All the new hats and pretty dresses were worn, and many a rosebud or spray of scarlet geranium, plucked from the wearer's own garden, enlivened the costumes. Much interest was shown in the card hung upon the outside of the tent, where each member might see his number and the amount of prizes he had won. The prizes were not given in money, but in useful articles to the value of the sum marked upon the card.

"I'm at the head of the houses and gardens, but I've only a shilling for my soup," Mary Jamison was overheard saying.

"My flowers were the best, and my parsnips got first prize," said Annie Kearney.

"My neighbour got first prize for her soup, miss," complained Nancy, meeting Miss M——.

"So I believe; but you got second prize for soup and first prize for your house and potatoes. You have seventeen shillings, and your neighbour only sixteen. I think you are both very well off."

"Ay, I'm satisfied enough."

"And will you often make that soup for Tom?"

"'Deed, will I!"

To describe the races, jumps, and other athletic sports which gave so much amusement during the evening would take up too much space; but the visitors enjoyed themselves greatly, and felt more and more convinced that our Cottage Gardening Society merits their continued patronage.

LETITIA MCCLINTOCK.

HER MAJESTY'S INDIA OFFICE.

WHEN Lord Palmerston was Prime Minister there was a great battle fought in Parliament, which was spoken of at the time as "the battle of the Styles." The business of State had long outgrown the capacities of the wretched-looking premises in Downing Street which used to be pointed out to visitors as the "Government Offices," and besides this, the buildings themselves were in danger of tumbling down. A committee specially appointed to consider the matter had presented a report to the House of Commons, recommending that one or more blocks should, without delay, be erected on a uniform plan to meet the requirements of the chief Ministerial Departments. The presentation of this report led to the offer of numberless suggestions and plans by architects and amateurs, but for a long time the project lingered in the regions of uncertainty and delay.

At last, however, the necessities of the public service forced the Executive to determine that "something" should be done, and Parliament was asked to decide what that "something" should be. First and foremost was the question—What style of architecture should be adopted? Then began the famous struggle between the friends of the Gothic style on the one side, and the admirers of the Palladian style on the other—a struggle that for the time being absorbed public attention, and obliterated the usual party lines. In the end neither style could claim the victory; for the Premier, with whom the decision practically rested, finally adopted the designs of a "Gothic" architect, modified however, according to his lordship's own ideas of what "public offices" should be. The result was the erection of a splendid pile of buildings in a style which is neither Gothic nor Italian, but a curious mixture of both, with the addition of a considerable amount of "Palmerstonian." Whatever may be the judgment of the *cognoscenti*, there is little doubt that the popular taste has fully approved Lord Palmerston's architectural judgment, while experience has proved that the new public offices are, on the whole, admirably adapted to the purposes for which they were designed.

On our way down Whitehall, walking in the direction of Westminster, we reach the new building as soon as we have passed Downing Street; in fact that famous official home of British Premiers marks the northern boundary of the vast ministerial palace. On the Whitehall side of the structure the Home and the Colonial Departments are housed. Passing through the archway in Downing Street we find ourselves at the Foreign Office, and on the opposite side of the vast quadrangle is the India Office, the principal entrance to which is, however, from Charles Street.

The India Office occupies the whole of that portion of the new building which abuts on St. James's Park, and which presents such an imposing appearance to a spectator standing upon the Horse Guards parade-ground. The fine semi-circular sweep which breaks the angle of the building facing towards the Duke of York's Column, is a striking feature in the frontage which overlooks the park. It is in this semi-circular part of the block that the Secretary of State has his suite of rooms. Entering the quadrangle from Charles Street, our attention is drawn to the series of sculptured figures which look down upon us from near the topmost storey—figures representing the various Indian tribes: Afghans, Ghoorkas, Mahrattas, and so on. As we mount one of the great staircases we find arched niches occupied with life-sized statues of great Indian statesmen; and looking round the noble court-yard which occupies the central portion of the building, we gaze upon a series of twenty-eight busts of men whose services in India their countrymen

"Should not willingly let die."

Havelock, and Clyde, and Lawrence have places there, besides other heroes of less renown. The angles of the court, on the ground floor as well as on the first floor, are filled with statues, standing in niches; Lords Wellesley and Hastings, besides the famous Warren Hastings, being among the great Anglo-Indians thus represented. The splendid State Ball given in honour of the Sultan of Turkey some years ago took place in this court-yard. Much of the internal decoration of the building is designed in keeping with the geographical associations of the Department; the ceilings of some of the rooms, for example, being worked in plaster models of Indian fruits and flowers. In the magnificent chamber in which the meetings of the Council are held, there are two remarkable things which formerly occupied places in the old East India House in Leadenhall Street: the famous fire-place of carved white marble, and a life-size portrait of Warren Hastings—"such a likeness," to use Macaulay's words, "as he would have wished posterity to have of him."

Prior to the year 1858 no India Office existed. The East India Company was virtually the Government of India, but there was a Department of State called the Board of Control, whose special business was to "control" the doings of "John Company," whether at his headquarters in Leadenhall Street or out in the far East. The terrible Mutiny of 1857, however, put an end to the Company's reign; and in the following year Parliament decreed that the double Government which had hitherto existed should be abolished, and the entire administration of the British Empire in India should henceforth be assumed by the Queen's Ministers.

A Bill to effect this great change was first brought in by Lord Palmerston, but his resignation stopped its further progress. Another Bill was introduced by

Lord Beaconsfield—then, of course, Mr. Disraeli; it was known as "India Bill, No. 2," but it was fairly laughed out of the House by one of Lord Palmerston's jocular speeches. His lordship said that whenever he met a friend in the street he found him in an uncontrollable fit of laughter, and as soon as he was able to speak and explain himself, it was always found that he was laughing at India Bill, No. 2! That Bill was withdrawn, and on the suggestion of Lord John Russell, the House proceeded to consider the matter by way of resolutions. Upon these resolutions a Bill was formed and introduced into the House of Commons by Lord Stanley (now Earl of Derby). It received the Royal Assent on August 2, 1858; on the 1st of September the political power of the East India Company ceased, and the Queen of England became Sovereign of India, though she was not proclaimed Empress of India until twenty years later.

By this Act the constitution of the Indian Government was settled. It decreed the appointment of a Minister, to be called the Secretary of State for India, with a salary of £5,000; and of a Council of State consisting of fifteen members, each receiving a salary of £1,200 per annum. The Secretary of State is a member of the Cabinet, and subject to that august body he is, virtually, the chief ruler of India. As a matter of routine almost all the business of the Department goes before the Council, and upon the more important questions a vote is taken, but the Secretary is not bound by these decisions, except in two cases, viz., the appropriation of Indian revenues, and the appointment of members of the Supreme Council in India. Upon all other matters the Secretary of State may, if he pleases, act upon his own judgment, and set aside that of the Council of State.

The Council of State is divided into six Committees of five members each; every member of the Council serving in two Committees. These Committees correspond to the several Departments among which the work of the India Office is distributed, viz., Financial; Military; Political and Secret; Judicial and Public; Public Works, Railways, and Telegraphs; and Revenue, Statistics, and Commerce. Each Department has a Secretary with a salary of £1,200 per annum, and one or more Assistant-Secretaries with salaries of from £700 to £900. In addition to these high officials there are two Parliamentary Under-Secretaries of State, besides a numerous staff of subordinate officers and clerks, with salaries varying according to rank and length of service.

The whole of the revenues of India are at the disposal of the Secretary of State and his Council, and they can draw upon these revenues for all expenses required for the service of India, whether in this country or abroad. The cost of the building erected for the accommodation of the India Office was charged to the Indian Exchequer, and the whole of the salaries and all expenses incurred at the India Office are defrayed out of Indian revenues. An annual statement, commonly called the "Indian Budget," is made by the Secretary of State as to the revenue and expenditure of the country, in the course of which some account is also given of its moral and material progress and general condition.

It would be impossible, within the limits of an article like this, to give our readers any adequate idea of the variety and the amount of business which is transacted daily at the India Office. When it is remembered that this Department is charged with the government of a country containing six or seven times the population of the United Kingdom, and having a revenue of 65 millions sterling, it will be easily understood how vast and how multifarious are the duties which devolve upon the Indian Secretary and his staff. The India Office is, in fact, an *imperium in imperio*, a government within a government; it contains within itself all the different branches of administration which, as regards other portions of the Empire, have separate Departments allotted to them.

Almost all the correspondence which reaches the India Office goes, in the first instance, to the central registry, from which it is distributed among the different Departments according to the nature of the business to which it refers. Much of it comes from persons at home who are more or less interested in Indian affairs; but, of course, most of it relates to the Government of India itself, and takes the form of despatches received from the Viceroy, or of communications with other Departments of State at home. The more important of these go direct to the office of the Secretary of State, or to the Secretaries of the Departments for which they are specially intended. The Departmental Secretaries deal with these despatches first, making such notes upon them as they require, then pass them on to the Under-Secretaries, by whom they are further considered and prepared for presentation to the Secretary of State, or the Committee of Council having charge of the particular matters to which the despatches refer. Finally, in certain important cases, which are far more numerous than many persons would suppose, these documents are submitted to the judgment of the whole Council at its weekly meeting.

Drafts of despatches intended to be sent to India are prepared by the Secretary of the Department to which they relate, and are then revised by one of the Under-Secretaries, either "Permanent" or "Parliamentary." In the revised form the draft is next presented to the Secretary of State, who approves or alters it, according to his discretion, and then refers it to a Committee of the Council. In due course it is considered in Committee, amended if necessary, and forthwith returned to the Secretary of State, to be laid by him before the full Council for final approval.

Every important despatch must be approved by the Secretary of State, and signed by him, before it is sent to its destination; those of minor moment may be signed by the Chairman of the Committee of Council, or even by the Secretary of the Committee, without any reference whatever to the principal Secretary of State. All secret despatches are delivered immediately to the Chief Secretary himself, and he dictates the replies to be forwarded, after consultation with his colleagues in the Cabinet.

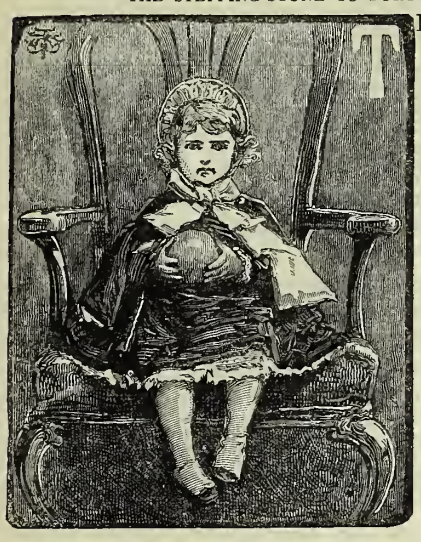
J. T. G.

MAJOR GODFROY'S DISCOVERY.

By FRANK BARRETT, Author of "Hidden Gold," &c. &c.

CHAPTER THE FOURTH.

THE STEPPING-STONE TO FORTUNE.



THE major came to London, and from the station went directly to Lincoln's Inn, taking Doris with him.

The child enjoyed the drive, and prattled gaily. She could speak of poor mamma now without grief; her heart was too young to mourn, too elastic to retain the impression of a blow. But sorrow had drawn fresh lines upon the major's face.

Leaving Doris with Baines in the outer office, where he might still hear her voice and be assured of her safety, the major entered with Mr. Garton into his private room.

"The child is Doris Drummond. You see what has happened," he said, putting his hat upon the table, and pointing to the deep band expressively.

"The mother is no more?" said Mr. Garton interrogatively. The major bowed his head in silence, and sat without speaking until Mr. Garton had said what could be said in sympathy with one who bore the visible signs of bereavement, and then he told in a few words what had happened at Nice.

"Her husband was not with her at the last?" Mr. Garton said.

"No, I warned him to keep away from me, and he accepted the warning. He is not an ordinary rascal: he is a villain, a cool calculating villain, who killed his wife without jeopardy his own life. It is not the end, but the means that society judges. The man provoked to a sudden act of violence stands guiltless in comparison with this subtle scoundrel with his patient malignance. The wife he killed served him but too faithfully."

Mr. Garton assented. "There is no redress," is the too frequent answer a lawyer has to give his suffering client.

"She lied for him," pursued the major. "I have reason to know that the account she rendered of her expenses was made up by her husband. He took all, and gave her scarcely sufficient to buy the necessaries of life. When she was dying he actually sent her to Nice by the slow train, to save a few pounds."

"Did she ever think of appealing to you?"

"He guarded against intervention, and held her in bondage by a threat, an idle threat, I believe, but one which she could not prove to be abortive."

"He promised to separate and take her child, I imagine?" said Mr. Garton.

"That was his threat, but of course he was powerless to put it in execution," said the major, with hesitating assurance in his tone. Mr. Garton shook his head gravely. "But the child is not his," said the major.

"The child is rather his than yours or mine. He is legally bound to support it, and for the same reason he may claim to protect it. Can you tell me if Mrs. Standish made a will?"

"She did not—the poor thing had nothing to bequeath."

"Then you are not even a guardian of Doris Drummond. The law cannot recognise you in any way except as a trustee for her money."

"Do you tell me that this villain can force me to give up my friend's daughter—a motherless, friendless child into the custody of a rascal, a murderer——"

"The judge could take no cognisance of crimes that are not in the statutes."

"Then I defy the law," cried the major, springing from his chair, and stamping his foot in wrath. George Drummond's child is mine."

Mr. Garton did not attempt to argue the point with his excited friend and client, to show him how utterly useless it would be for him to set the law at defiance so far as the welfare of Doris was concerned.

"We are supposing an extreme case," he said, with a composure that contrasted strongly with the major's agitation. "If we can prove that this man is an unfit guardian, we can appeal to the Court of Chancery. But there is little probability of his claiming Doris—"

"You don't know the man, sir—you don't know him," the major said, walking up and down the room impatiently.

"I think I do. In the first place, he is a coward—as villains are. If he could see you now, major, he would bite his tongue off rather than say a word which might bring the law down on him; in the second place, he dares not show himself in public until his father-in-law has forgiven him, and from what I know of Mr. Pitburn, a good length of time will elapse before that takes place."

"Mr. Pitburn!" said the major, in a tone of disgust. "What does he care for the daughter that is gone? He has not seen her for eighteen months, and then he only called upon her to abuse her."

"It is not her loss he will regret so deeply as the

loss of his money; loss of property, men of his kind never forget or cease to deplore."

"What loss of money?—I have not heard of it."

Some months previously Mr. Pitburn had retired from business and removed from Chislehurst, and the major had not since corresponded with him.

"His son-in-law, Blake Standish, lost heavily on the race-course," said Mr. Garton.

"I heard so much."

"And to pay his 'debts of honour,' Mr. Standish forged the signature of Mr. Pitburn, upon cheques which were presented and paid. Mr. Pitburn has promised to prosecute his son-in-law for forgery if the money is not refunded immediately. As there is little chance of Mr. Standish being able to raise the money—fifteen hundred or two thousand pounds, I believe—now that he can no longer work upon you through his wife, he will, in all probability, have to leave the country. At any rate, he dare not go into court to recover the guardianship of Doris Drummond, with the impending possibility of a criminal prosecution."

The major drew a long sigh of relief. Mr. Garton continued—

"So I think, major, you may relieve your mind of any anxiety upon this point; and now, if you feel so disposed, we will talk about our financial position."

"Willingly."

"The heavy calls made upon you during the past eighteen months by Mrs. Standish, have absorbed the whole of the interest to which she was entitled, and considerably more. The low bank rate was insufficient to meet the pressing and frequent demands, and to satisfy them we have impinged on the capital you have in trust for Doris Drummond, to the extent of something over fifteen hundred pounds."

"I shall economise, and pay that back from my own income."

"You are over-scrupulous," said Mr. Garton, smiling. "The daughter would scarcely call upon you for the money given to her mother, if she knew the circumstances of the case."

"Those unhappy circumstances she shall never know, if I can help it," cried the major. "The money was given me to keep for her. My word! Garton, what kind of man should you think me if I offered her less than the sum entrusted to me? I am responsible for all, and she shall have it to the last farthing."

The lawyer bowed his head gravely, and was silent until the major again cooled down; then he asked—

"Do you intend keeping the money in consols?"

"Until I see a better investment."

"You can scarcely invest it in anything but Government stock without incurring risk."

"I understand that. But at the same time in the child's behalf, although of course on my own responsibility, I should incur that risk."

"That is what I wished to know," Mr. Garton said, in his undeviating quiet tone of voice, as he opened a drawer by his side. He took out a blue paper, and slowly unfolding it, asked—

"Do you know anything of mining?"

"Nothing," replied the major.

"I will give you this to read at your leisure. It is the original prospectus of the Dolly Pentreith Tin Mine. I have kept it with a kind of affectionate regard, for it was the stepping-stone to my fortune. I invested my first fifty pounds in the mine, and have bought in since whenever I had the chance. The shares are now so valuable that they are rarely in the market." Mr. Garton paused a moment, and then said with some constraint in his manner, "I have, I regret to say, an immediate requirement for ready money, which compels me to sell my shares. I shall put them in the hands of a broker, and at the same time I can, if you choose, instruct him to buy them in for you. I have delayed selling for some days, thinking that you might like to avail yourself of this exceptional opportunity."

"This is very good of you, Garton," said the major. "It is a thoughtful act of friendship which I shall not forget."

"It is not worth mentioning—the delay has not greatly inconvenienced me. You will take this old prospectus with you, and I should advise you to see a broker yourself, for your better assurance."

"I can find no better adviser, nor more honest man than you. The word of one gentleman to another is sufficient, and you say this investment is good."

"The yield has increased every year, and the surveyor in his last report—which is inside that prospectus—says that for all practical purposes the lode is inexhaustible. You will come to me to-morrow, and we will conclude the arrangements. And now the little girl must be tired of waiting, so we will conclude our business talk for to-day. As to Standish, as I said before, you need be under no apprehension respecting *him*."

CHAPTER THE FIFTH.

DOLLY PENTREITHS.

MAJOR GODFROY invested three-fourths of the money he held in trust for Doris Drummond in Dolly Pentreith shares, without any of those precautionary investigations which an ordinary man of business would have felt it his duty to make. He read the prospectus and the annual report, not clearly comprehending what was set forth in the balance-sheet, and took all that was said as unexaggerated truth, by reason of his faith in Mr. Garton's honesty and discretion.

In his profession he had mingled only with gentlemen. His acquaintances had all been men of honour; his only friend, Colonel Drummond, was as simple and unworldly as himself. His confidence marked him out as a victim for the unscrupulous. Hitherto his poverty had saved him from their attacks. Only those who admired his high principles chose to make his acquaintance, and they were not men who could take advantage of his credulity. He knew practically nothing of the lower side of humanity. He abjured the company of the faster officers that he met in the mess-room and the club, or he might have learnt something in this respect from them. He had seen felons in the dock, and villains on the stage, and expected to find

the same strongly-marked characteristic in all rascals. It appeared to him that society was divided into two distinct classes, the upright and the dishonest; and as he had met only the one, his idea of the other was entirely fanciful. This partial knowledge weakened his judgment and strengthened his prejudice. Men were wholly good or utterly bad as a single action might decide. He did not recognise the existence of that large majority of men who are neither faultless nor perfect, who are governed by the circumstances of their lives, and are good or bad as expediency moulds them; and so having for twenty years found Mr. Garton honest, he trusted him now implicitly, and considered it not only unnecessary, but unworthy, to inquire closely into his reasons for selling out of the Dolly Pentreith Mining Company.

Major Godfroy kept a diary, a modest characteristic record of his doings and reflections during the day. He commenced it when his old comrade Colonel Drummond was taken away, and it had served him since in place of a friend. It seemed a necessity to him after the habit of years to open his heart at night time. Sad enough it was at first to chronicle his sorrow and find no sympathy; but after awhile it became a pleasure to him to write down his simple reflections, and to chat, as it were, to this irresponsive friend.

An extract from his diary will show how he regarded the financial transaction with Mr. Garton, and the state of his feelings at this time.

"This is the last day of the year 1861. With this day a chapter of my life closes; and to-morrow another opens. I have sold my commission and my sword will not be drawn again. It is not without regret I write these words, remembering the past; but my regret passes away as my thoughts turn to the future. I could not retain my commission and do my full duty to George's dear child Doris at the same time. I sometimes fancy that had I resigned my commission in 1856 I might have saved his poor widow from her fate. It must have been during my necessary stay in Chatham (1857) that the rascal Blake Standish found opportunities to deceive her. Also this day I have concluded my financial negociations with Mr. Garton, and invested fifteen thousand pounds of the trust-money in shares which cannot fail to double or treble the fortune which my Doris is to have on her eighteenth birthday. I write the words 'my Doris,' for the child seems now to be mine indeed. She has no friend in the world save me, and I may say that I have no friend in the world but her. She calls me father—a title which I accept willingly, for with God's help I will be a father to her in all that concerns her well-being. It is not without a sense of the great responsibilities before me that I regard my position to sweet Doris Drummond. I know very little about children, and it may be that some likeness in the child's face and manner prejudices me, yet I am fain to think that there never was so good and beautiful a little girl as my Doris. My heart alone knows the awful fear I felt at the moment I received orders to take the —th up the hill at Alma—fear not for my own life, but for the lives of those I led, and for which I was answerable to my country and to God. Some such feeling overcame me when I first heard Doris call me 'father,' and realised all that the word implied. But I gain confidence as I attack the difficulties of my position. I have to cultivate her best tendencies, to strengthen her principles, to replace her father's example by showing her how he would have done had he been spared. She must be her own protector if I die before she marries, therefore it is necessary she should learn what is wrong as well as what is right, that she may avoid her poor mother's fate. She must know mankind and the ways of general society much better than I have learnt them. All these ends may be gained by watchful care and an unselfish devotion to her interests. It will be necessary for me to extend my circle of acquaintances and be more like other men in social habits, for I am convinced by what I have read that solitude induces selfishness, and that society is essential to the wider and better knowledge of one's duties and one's happiness. In reading Pope's essay on criticism this evening, I noted this remark: 'The proper study of mankind is man,' and I believe he is right. Moreover my child can find no companions of her own age, if I remain as of late years like a snail in its shell. I must overcome my prejudices and go into society. It is a great source of satisfaction to me to know that her money is so well disposed, for I am convinced by my own observations that misery and poverty are correlative terms. One cannot go from Threadneedle Street to the Marble Arch without finding evidence of this fact. My heart ached last evening as I returned from the City (whither I had been with Mr. Garton to sign some papers at a stockbroker's in Throgmorton Street) to see the throngs of young women returning from their work. Poor pale-faced girls; what enjoyment of life have they? what hope of a happier future? Happily, my Doris is protected from these evils. I calculate that the sum I have in trust will be doubled by the time she receives it; and then with expanded knowledge, and developed graciousness, she will use her fortune well, and realise all my fondest hopes. I look forward, not I hope with presumptive confidence in myself, but with the hopeful feeling that, under Divine guidance, I shall worthily fulfil my trust and be indeed a father to my friend's child."

One sees the nature of the writer in this extract, despite the trite and prosy commonplaces with which the gentler thoughts are mingled—one sees the man as he was—not wise, but good; with a cheerful, trusting, hopeful heart in his undertaking.

The writing was still fresh—the first week of the new year was but just closed, when the cloud rose over the horizon which was soon to darken the major's life.

He was sitting before the fire in his apartment in Bloomsbury, when his servant Baines entered the room and presented a card. The major read the name and said, "Ask Mr. Pitburn to be good enough to come to me;" then he rose from his chair, laid the old leather-covered duodecimo he had been reading upon the table, and walked to the door as Mr. Pitburn came nimbly up the stairs.

"My dear major! so I have found you at last," said the visitor, pressing Major Godfroy's hand with much cordiality.

The major bowed, withdrew his hand as soon as he was permitted, and offered Mr. Pitburn a seat, not a little astonished at his warmth—their last parting having been of the coldest kind.

"You seem astonished that I should have found you at all, and it will not decrease your surprise when you know that my thanks are due to Dolly Pentreith for the discovery. You must know that, although I have virtually retired from business, I still go into the stock market and do a little business now and then. The same feeling animates men of your profession, major, and that's why we find such a lot of old generals and commanders in the army when they're not wanted, I'll be bound; ha! ha!"

The major did not smile at this brilliant sally, but sat quite still in his chair, looking at his visitor, and wondering whether he had dined too freely.

"The Stock Exchange," Mr. Pitburn continued in the same exuberant spirit, "the money market is the great nervous centre of finance to which is immediately communicated every touch upon the outlying filaments. I happened to be saying this very afternoon, what a glorious, what a splendid investment Dolly Pentreiths are, when a man told me of your good fortune in having secured fifteen thousand pounds' worth of the shares last week. 'Major Godfroy,' said I, hearing the name, 'why, surely that must be my dear old friend; where can I find him, I wonder?' My friend told me that Garton, the solicitor of Lincoln's Inn—sharp fellow, Garton, knows what he's about—that he had a finger in the pie. So off I went straight to Garton, demanded your address, and here I am." He stopped and waited for Major Godfroy to speak.

"Do you know that your daughter is dead?" he asked, in his calm low voice.

"Poor Maud—my Maud, ah! it is a sad thing, death," exclaimed Mr. Pitburn, dropping his voice to a becoming pitch, and altering the expression of his face by an act of the will, as a child by simple mechanical pressure makes an india-rubber face change from the mirthful to the lugubrious. "Poor Maud—she is no longer here to gladden us with her smile, as the poet says—nearly two months since she was with us, as it were. Well, it is what we must all expect, and the family on her mother's side are all consumptive. Consumption and that vile wretch her second husband killed her. You have heard how he robbed me. It was an awful blow to us all."

"Poor soul!" murmured the major.

"Yes, an awful blow. Fifteen hundred pounds, I give you my word, major."

"Had you any evidence of his heartless cruelty before the blow fell?" inquired Major Godfroy coldly.

"Before?—No. He imposed upon us all. But I have plenty of evidence now—too much, I assure you. There are all the cheques, and he shan't dare to show his face in public until every penny of the money embezzled is refunded. I have threatened to have the law on him, and I would too if there was anything to be got by it. I could lay my hand on him at this moment if I chose, but I'm not such a fool as to throw good money after bad. Why, what would be the good of prosecuting him now? He has no money, and a criminal action would cost a great deal and do my name no good. No, as I said to my wife, 'wait, my dear; my Maud shall be avenged.' He's a clever young fellow, and may presently make a heap of money on one of these horse-races—a dangerous speculation that I never meddled with in my life—and then I will be down on him and have back all I have lost."

"He cannot restore your daughter."

"Ah, to be sure," responded Mr. Pitburn, drawing down the corners of his mouth. "Well, well, it's a sad thing, but it's what we must expect. 'So death alike on all doth fall, Goliath great as David small,' as the poet sings."

"If you have no further business—" the major said, rising from his seat, and wishing to terminate the unpleasing interview.

"But I have further business. Sit down, my dear major. I have not touched upon the very important subject I have in my mind. I have come here with a generous and unselfish purpose, and I will not leave it unfulfilled. You will observe, major, that since we last parted I have turned over a new leaf. In a word, sir, I look no longer on the gloomy side of events. I have perceived my error and done my best to alter what was wrong. As a pessimist, I could see nothing good or agreeable; as an optimist, all appears *couleur de rose*, as they say in the classics. It will not be surprising to you, therefore, that I look upon you now as I was never able to see you before. Your generous interest in my daughter—my Maud—your fatherly care of her child, whom I might reasonably have been called upon to support, your independence, and unvarying kindness all combine to touch my heart and fill me with admiration. For some time I have asked myself how I might repay you when occasion offered, and the news that you had invested money in Dolly Pentreiths suggested the opportunity. I have some Dolly Pentreiths, major, and if you have any more capital you shall have them. Mark—I do not wish to make a profit—I do not wish to charge you at the exorbitant rate you paid that Garton. You shall have them for what they cost me. You shall take them at par."

The major was confounded.

"I have been mistaken in you, I confess," he stammered—"I did not give you credit for such generosity. I make this admission that you may know it is from no want of appreciation that I decline to benefit by your loss."

"I can understand the mistake you made in my character. You were influenced by my arguments against looking upon the sunny side of things. But that is all changed, and as for profiting by my loss, do not speak of it. Ought I not directly or indirectly to contribute to the welfare of my daughter's child—my

own dear grandchild? Of course I should! In her name I ask you to accept these Dolly Pentreiths—at par."

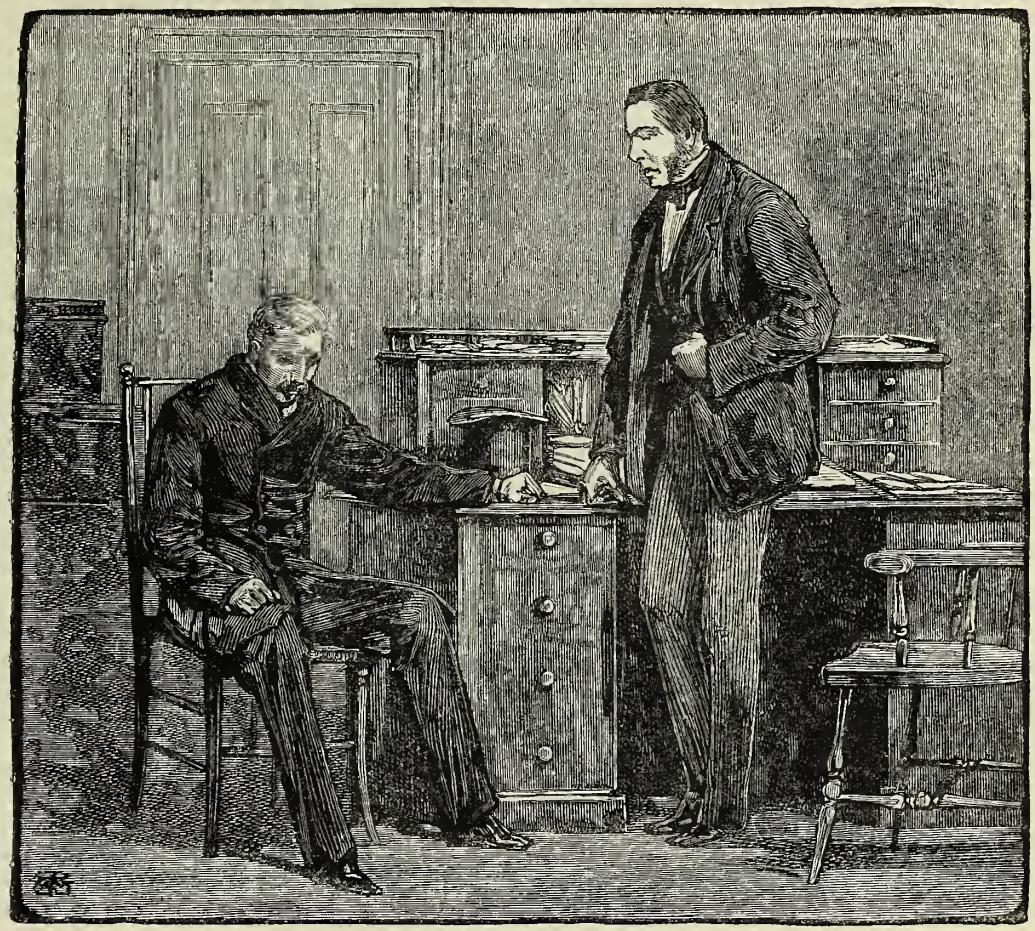
"In her name," said the major thoughtfully. "She has, to be sure, some thousands yet uninvested, and I expect money for my commission."

"A few thousands is all I want. And now, my dear major, it is too late to transact this business finally to-night, but I shall give myself the pleasure of calling upon you the very first thing to-morrow morning, and dear major—to-morrow morning at nine sharp." He caught up his hat hastily and concluded the interview before the major could make any further objections to this precipitate act.

CHAPTER THE SIXTH.

PRINCIPLE VERSUS INTEREST.

MAJOR GODFROY resumed his seat before the fire, when the door closed behind Mr. Pitburn, in a state



"THERE IS NO REDRESS" (*p.* 481).

we will go to the City together, and settle it all off at once."

"Mr. Garton is my legal man, and we can call at Lincoln's Inn Fields on our way."

"In our way—yes, and so will Mr. Garton be. Take my advice; have nothing to do with the lawyers, and beware of Garton. He's too clever by half, and not so scrupulous as he should be."

"Mr. Garton is my friend," the major answered stiffly.

"Oh! that alters the case entirely, entirely, entirely. But still we'll have nothing to do with Garton. I shall have the brougham out, and we can do the business without any legal expenses. To-morrow morning, my

of mind bordering on bewilderment. Simple and unworldly as he was, he yet felt that some better explanation than Mr. Pitburn had offered was needed to account for his altered feeling towards Doris and himself while he remained callous to the past sufferings of his daughter, and was no whit less vulgar, coarse, and objectionable than of yore. Yet he felt that it was unjust to deny that credit to him for disinterestedness, which he had so readily accorded to Mr. Garton for the same service.

He took up the little volume of poems he had been reading, and tried to fix his attention on it, but questions came to his mind which engrossed his thoughts and added to his perplexity. With the book

upon his knee and his eyes fixed on the cinders of the fire, he sat for an hour, and then his reflections were broken by the second entrance of Baines.

"If you please, sir, Mr. Standish is at the door, and wishes to see you on important business, he says."

"I will see him," the major answered, when his surprise subsided. Nothing was to be gained by refusing to see the man, and Major Godfroy was not the man to avoid difficulties merely because they were unpleasant.

Blake Standish entered the room and bowed to the major, who received him without a sign of recognition, and stood by the table erect and firm.

"We will come at once to business, major," said Blake Standish, as he turned from closing the door, "and without any pretences. I have no better motive than my own interests, and I have no intention of asking for pardon or kindness which you may say I don't deserve. I may be a rascal, but you shall not say I am not straightforward. Now to the point. I have come to make a bargain with you."

"You may save yourself further trouble," said the major distinctly. "I refuse to have any transactions with you."

"We shall see about that presently," said Standish, with a short laugh. "For the sake of Doris, whom you have undertaken to protect, you are bound to hear me. Her present safety and her future fortune are at stake. Have I your permission to lay my case before you?"

The major was constrained to assent, and Standish continued—

"In the first place, I have a legal claim upon that child, which neither you nor any one else can prevent me enforcing if I choose. In the second place, I am in possession of knowledge which is worth all the money that has ever passed through your hands. If I were speaking to a man like myself, I should say you stand to lose twenty or thirty thousand pounds, and I can give you a tip that'll land you out safe and sound."

"You are not speaking to a man like yourself."

"Right you are. We will go back to the language of the innocents. Your entire fortune and all you have in trust is in jeopardy. By a word I can save you; if you refuse to buy that word you are lost."

The major was silent. Standish, pursuing the advantage he had, said—

"Turn it over quietly in your mind, major. I don't want to hurry you. I say, and I will prove what I say before I touch a penny of your money—I say your whole fortune down to that very sword in the corner, and the photograph on the chimney-piece, may all be lost by this time to-morrow; and remember this, that in twelve years I, as the nearest relative of Doris Drummond, shall demand from you in her name the money given you in trust by her father. If it is not forthcoming, dishonour and perhaps a prison will be your punishment."

"How dare you—what do you mean?" cried the major huskily.

"Don't worry yourself, major. Take it calmly. Don't fluster. Chew it over in your mind carefully. Mark my words—I won't touch a penny until I've proved the fact, and I want no better security than your word for my payment when you find I've done all on the perfect straight."

"You—you have not stated your terms for this revelation."

"I want fifteen hundred pounds, and——"

"I see," exclaimed the major quickly, "you wish to return the money you have embezzled in order that you may claim Doris and get her into——"

"Oh, no, I don't, major. You're too clever this time. For fifteen hundred pounds I will sign any paper your lawyer chooses to draw up which will keep her out of my clutches, and you shall have the tip into the bargain. You see it's a doubled-barrelled bargain for you. That's the best of dealing with a man like me; you know what I am, and can guard yourself."

The major bent his brows in thought. An agreement such as Standish offered would alone be worth the £1,500 he asked for, without the information that was to save his fortune—it was indeed the only inducement to listen to his proposal when the first threat of dishonour had been discountenanced. What could jeopardise his or Doris's pecuniary position? Had not the man he trusted—the man Colonel Drummond trusted—given his word as to the stability of the Dolly Pentreith Mining Company? and had not his word been supported by the earnest recommendation of Mr. Pitburn? But the personal safety of Doris from this man was another matter. He might realise money, as Mr. Pitburn had suggested, by some future bet, and then he might claim Doris. This latter thought aroused the gallant major to a recognition of his own power of defending her—of his own personal courage and superiority to such a despicable man as Standish.

He drew himself up and looked across the table at the man who offered to bargain with him—to sell him safety for a few hundred pounds.

"I have feared no man yet, and shall I fear such a creature as that?" he asked himself. Then he said with a firm voice, "I have heard what you have to say patiently and unwillingly. I began by saying that I would have no transactions with you; and I conclude by repeating those words: I will have no transactions with you."

"Nonsense, man, you're joking," said Standish incredulously. The major without replying moved towards the bell.

"Wait!" cried Standish. "Don't ring that bell until you have heard one more word from me. Think of Doris if you cannot forget yourself." This pithy though unmerited exhortation arrested the major. He half turned to Standish, looking at him from under his contracted brows, and with one hand resting on the bell.

"You think that what I said about your money is just a catch and no more. You force me to tell what I know; but I trust to your honourable sense of gratitude to repay me if you make use of the information I give you. I have reason to know that Pitburn, my father-in-law—who is as great a rascal as

I am, only that he gambles on the Stock Exchange instead of the turf—is coming here with the view of selling you his shares in the Dolly Pentreith Tin Mine. He will sell them to you for anything he can get—he will give them to you if you will take them off his hands. And I'll tell you why—the Dolly Pentreith's 'bust up!'"

"Burst up?" the major said, hoping he misunderstood the slang.

"That's it. The lode's given out or something—I don't know mining slang—but in effect it is this: the mine's not worth a penny, and before a week there will be calls upon the shareholders to meet the run upon capital—I suppose that is how it's put——"

"Impossible!" gasped the major—his hand dropping from the bell-handle.

"It's a fact, and you shall know how I came by it. I've a young Irish friend who writes for the papers, and ferrets out stock-jobbing items for the dailies. He heard the rumour in Throgmorton Street after the market was closed. It was given in confidence to my friend and old Pitburn. Pitburn was mad when he read it, and soon after Brian—that's my friend—heard him inquiring where you could be found. Brian knew his game and told it to me, and now if——"

"Then it is only a rumour," the major interrupted.

"It's a verification. The rumour came last week. A shareholder himself, an authority upon mines, went down to see the truth on his own account, and telegraphed to the broker to sell out for him at once. Of course the broker will keep quiet until his shares are sold; but by this time to-morrow it will be known all over England, and Dolly Pentreith shares will be an uncommonly disagreeable white elephant for the holders."

There was too much of truth in the speaker's narration for the major to remain incredulous. It was already corroborated by fact. He put one hand on the arm of a chair near him to support himself; and his eyes fell to the ground.

"You can't doubt it now," continued Standish, "and so, as I was about to say, if you consider that I have saved you from being cheated out of a fortune, you ought in honour to make me a douceur. I don't ask anything till my facts are proved. But if old Pitburn comes here, and, warned by what I have told you, you refuse to take the shares he offers——"

"I have already taken shares," the major said, involuntarily speaking his thoughts.

"Then my tip is still more valuable. At present no one knows what has happened, and you can just take your shares into the market the first thing and sell out for what you can get."

"You forget whom you advise," the major said, recovering his spirit with this suggested act which seemed to him entirely dishonest.

"Well, I see nothing ungentlemanly in the act."

"I do," replied the major; "and that is sufficient for me. I shall not profit by your revelation."

"You are mad!" cried Standish, stamping his foot in impatience; "you forget my claim entirely."

"I have said that I decline to make use of your information."

"It is not that. I allude to my claim as the father, by law, of Doris Drummond. On her eighteenth birthday you have to pay up; and as there's no fear of my dying before that time, you may take odds I shall see that her claim is settled. Now don't be unreasonable. Look at this affair from your own point of view. Take it as a matter of honour that you have to pay the trust-money in twelve years, and then tell me how you will do it if you let it all slip out of your hands now for the sake of a fad."

"Nothing you can say will alter my principles, and no consideration can justify dishonesty. When the time comes I will pay what is due, or take my punishment in default. That must content you." The major rang the bell.

"Well, of all the stupid old idiots!" muttered Standish, as he departed from the room. "If that's honour, give me common sense by preference. I should like to know what would become of commerce and horse-racing if that sort of honour prevailed. Well, may he lose his money, I say—if it is only as a warning to other crotchety old fools."

The major sank into a chair, and for a time seemed incapable of any control over the current of his thoughts. The past and the future came before him in confused images like the events of a dream. When at length his mind grew calmer, he asked himself how he was to avert the impending calamity. He saw no outlet. He did not give a second suggestion to the means suggested by Standish. No end justified dishonourable means to his mind. The only thing he could think of was to ask the advice of his friend Mr. Garton. He took a cab and sought the solicitor at his private residence. Mr. Garton was not at home, he was told. He did not then doubt him; it was not until morning that the suspicion of his dishonesty first flashed upon him, and then he tried to dismiss it from his mind as ungenerous and unfounded. Yet circumstances strengthened the idea, and he could not forget Mr. Pitburn's remarks, "He's too clever by half, and not so scrupulous as he might be." This phrase he repeated unwillingly again and again, until it seemed to him that the stricture had arisen from himself and not from Mr. Pitburn.

He left the house before Mr. Pitburn arrived, and walked to Lincoln's Inn with the faint hope of finding the solicitor in his office before his usual hour. The office was not open when he reached it. First the boy arrived and then the clerk. The clerk knew nothing—had not heard any rumours about the Dolly Pentreith—could not say what time Mr. Garton would arrive. The time seemed interminable as he waited. At length the door opened and Mr. Garton entered—neat, white, cheerful as usual.

"I must speak to you immediately," the major said, before Mr. Garton's salutation was ended. The solicitor led the way at once into his inner office.

"There is a report that the Dolly Pentreith Mine is closed, or something to that effect," said the major, visibly agitated. Mr. Garton smiled incredulously.

"I have seen nothing in the paper of such a collapse," he said, holding up the folded journal in his hand; "and I was on the Exchange yesterday afternoon."

The major recounted what had occurred; and Mr. Garton looked grave.

"There was an unpleasant rumour last week," he said, "but it was supposed to be a fiction got up by a jobber who wished to buy. This report may be, and probably is, but another ruse of the same kind. I should advise you not to act rashly. We will go to Capel Court at once, and if the probabilities are against us we can put the shares into the market at once—if you think proper."

"But I don't think proper. Do you suppose I would sell my shares, believing that they would ruin the purchaser?" asked the major, looking at Mr. Garton with anger and suspicion.

"I am sure you would do nothing dishonourable; but you must understand that there are speculators who will buy even under such circumstances on the chance of a favourable turn."

"I decline to take part in such transactions."

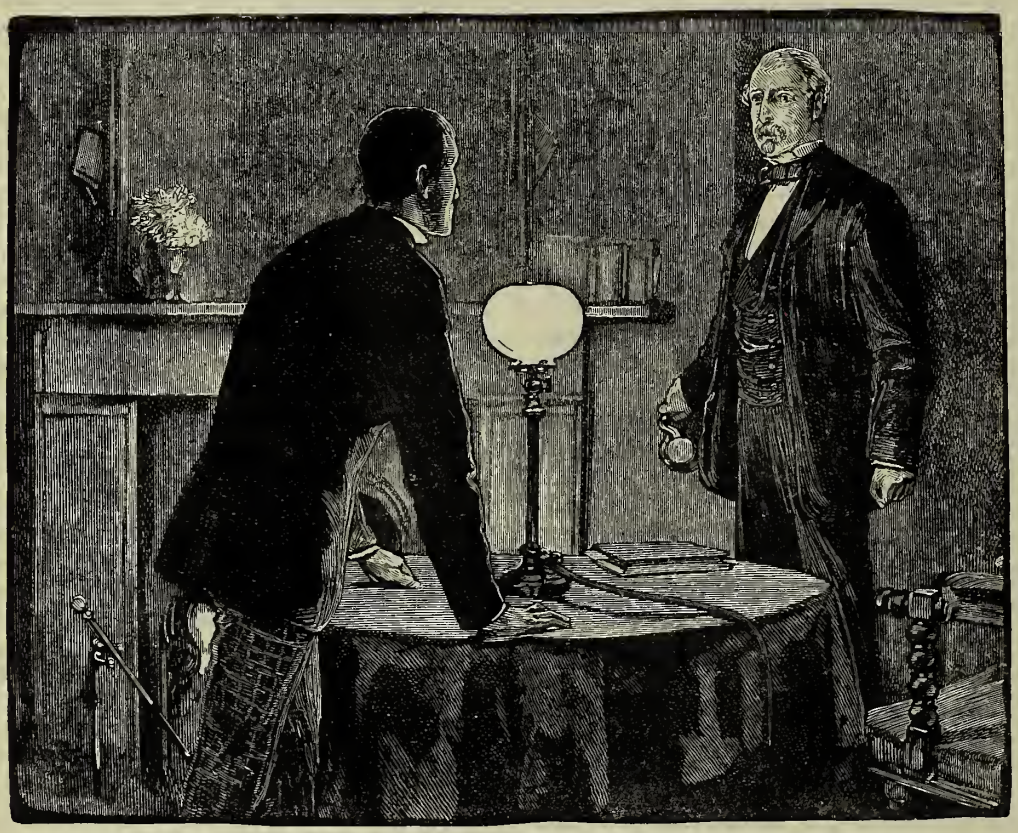
Mr. Garton bowed acquiescence, and did not attempt to argue the point.

"We will go into the City at once," he said, "and we shall learn before we leave if this report is true or not."

Mr. Garton left the major in the broker's office while he went to make inquiries. In less than half an hour he returned with a quick step and said—

"The report is unhappily based upon fact. The shares have already sunk alarmingly, and if you sell it must be at a loss to you. Nevertheless you may yet dispose of them—if your scruples will permit you."

The major hesitated a moment, as the consequences of holding the shares presented themselves to his mind; as the figure of his old friend, who had trusted his child's happiness in his hands, rose in his imagination with that look of confiding love which was his last expression as he lay upon the hospital bed at Scutari; then he asked in a tone of piteous distress—



"DON'T RING THAT BELL UNTIL YOU HAVE HEARD ONE MORE WORD FROM ME" (*p.* 486).

"What *can* I do?"

"In this case I cannot advise you," said Mr. Garton. "It is entirely a matter of conscience. At the same time I must beg you to make your decision at once. Every moment makes your position worse."

"No!" cried Major Godfroy, with a sudden movement as if he were thrusting temptation behind him. "I will *not* do what my conscience forbids. Whatever the result may be, I will hold the shares."

Mr. Garton took a seat in silence; the major stood immovable with a face as deadly in hue and stillness as though it were of wax. Mr. Garton broke the silence.

"Although this report be true, it is nevertheless possible that the mine may recover its former prosperity. You remember I explained how it had once before been discarded because of its seeming exhaustion. We cannot judge truly the state of the case until we have received the engineer's report and the opinion of scientific men."

But Major Godfroy heard nothing. All was lost; and from the grave his dear friend seemed to say to him, "I trusted my wife, my child, and my fortune to your care, and you have suffered my wife to be murdered; you have thrown away my money; and nothing now remains for you to lose but my child."

"No," he answered aloud, in a voice terrible in its intensity, "Doris is not lost, and my trust shall not be wholly betrayed!"

END OF CHAPTER THE SIXTH.

LONG LIFE: HOW TO OBTAIN IT.

BY A FAMILY DOCTOR.



"CUI BONO?" is the question which will rise readily enough to the lips of many of my readers, as soon as they glance at the heading which I have chosen for my present paper. "*Cui bono?*" Why should we endeavour to prolong our lives? Death will come sooner or later, and what matters it whether it be a hundred days or a hundred years hence? Will it not be all the same in the long run? "Let us eat, drink, and be merry, for to-morrow we die." "Give us a short life and a merry." This is the song of some, but such a way of reasoning is, to say the least of it, a very thoughtless one.

A reckless method of living is a suicidal one, ay, and it tends to suicide of the very cruellest kind. We term it madness in a man to lay violent hands on himself, and *suddenly* to crush out the life that God implanted in his breast. Shall we designate as anything less than folly, then, the living in a manner likely not only to shorten our lives, but to bring about premature or early old age, decrepitude, slow but sure decay, and death?

> "'Twas thought," says one, "by ancient sages,
> That love of life increased with years
> So much, that in our latter stages,
> When pains wax sharp and sickness rages,
> The greatest love of life appears.'

The poet is right, or rather, I should say, the ancient sages were right, if they referred to people who lived careless, reckless lives; for, as a rule, the very persons who have belonged to the "short life and merry" school of thought are the least willing at last to succumb to the inevitable. Such people, to use a homely illustration, seem to me to draw a bill on their existence, payable at a certain date, for value received; but when the time is up, and Nature presents the bill for settlement, they are precious unwilling to meet it, and begin to think that after all they would have been far better off if they had not drawn the bill at all.

I can put the lesson I want to convey before the reader in another shape. Imagine, then, a magician, whom we may call Remorse, taking a walk along a highway—or a by-way, for that matter—with the intention of finding and conversing with some one well up in years, who, in the days of his prime, lived as if life were a thing that could never be spent. He does not go far before he finds one, you may be sure. See, yonder he comes, crawling on a crutch.

"Good morning," says the magician.

"Ah! good morning to you," says Some One, glad, with the garrulity of advancing infirmity, to have anybody to speak to.

"You seem to be very old," says the magician.

"Well, sir—no, sir, I'm not so very old by any means. I——"

"Oh, I see," says Remorse, interrupting him, "you lived a bit fast in your younger days, did you?"

"No, sir, not so very fast either."

"Somewhat carelessly, though?"

"Well, sir, the truth is, I just took life very much as I found it. I never did have much thought for the morrow."

"And that accounts for your present condition—for your debility, and that crutch," says Remorse, "doesn't it?"

"I'd be slow to believe that, sir," says Some One.

"Anyhow," says the magician Remorse, "you had a good time of it, hadn't you?"

"Well," replies Some One, with a laugh, "I dare say I had my fling, sir."

"And the recollection," says Remorse, "makes you smile."

"Ah!" says Some One, "I don't know that it is a very pleasant one, sir; only people must get old, and it is, maybe, just as well as it is."

"But people have no right," says Remorse, "to get old before their time. Now if I could roll back the scroll of years, if I could give you youth again, and could then induce you to live rationally and thoughtfully, here is what you would be at your present age, instead of what you now are. Look into this magic crystal, and tell me what you see. I'll hold your stick."

"Why, I see myself, sir, and still it isn't myself."

"Are you leaning on a crutch?"

"That I'm not. I'm walking straight and briskly enough."

"Seems there to be care on your brow?"

"Never a shadow of it, sir, I'm looking as bright and happy as a lark; but so is everything around me, even the grass and the flowers look more pleasant, and the sky bluer in the crystal than out of it."

"Ah! but," says the magician, "the crystal only represents yourself and all your surroundings as they might have been. Had you taken care of yourself while yet young or in your prime, your life would have been a more solid and happy one, the time gone by more pleasant to look back upon; you could have done much good in life, and made more people happy, the very thoughts of having done so would have blessed and cheered you now, your old age would be calm and tranquil, and your death in all probability painless. But there, I cannot give you back your youth, so take your crutch and crawl along."

Now, reader, here is something worth knowing and remembering: the average duration of the life of the people in the British Islands has of late years greatly increased, in the direct ratio of the spread of science and enlightenment, especially as regards the laws of hygiene and sanitation. This fact concerns both you and me individually; we have not only the power of death within our reach, but we have, to a great extent, the power of prolonging our lives. Living by rule, and obeying nature's simple laws, may seem very irksome to people at first, but doing so soon becomes a habit, and a blessed habit, and one that tends to happiness, to comfort, and to length of days.

A great deal might be said about the benefits of regularity in our modes and ways of living. As a proof of the beneficiality of regular living, I may instance the fact that old people who have once settled down in a kind of groove of life, if I may so call it, cannot be unsettled therefrom even for a few days without danger to health and life itself. They may have, perhaps, their regular time for getting up in the morning, certain methods of ablution, certain kinds and qualities of food and drink, certain hours for taking these, certain times for rest, exercise, and recreation, and a hundred other things, which, taken separately, may seem but trifles, but taken in the aggregate make up their lives, and they know and feel that they must not be unsettled. The wheels of life will run long in grooves, but soon run out over rough irregular roads. Habits, whether good or bad, are easily formed when one is young, but when one gets up in years it is terribly difficult and ofttimes dangerous to set them aside. Therefore, I say to the young—ay, and to the middle-aged—study, if you would live long, to be regular in your habits of life in every way, and let your regularity have a good tendency.

Be regular in your hours of getting up in the morning and going to rest at night, but you cannot easily be so unless you are regular in your light-of-day life. The simple fact that you lie down for so many hours out of the twenty-four, does not prove that you have secured that necessity of life, a good night's rest. A little preparation of both body and mind is needed to enable us to enjoy sound and refreshing sleep, and so be fortified by morning to struggle successfully with the events of another day. Do not forget that during sleep the brain is in a comparatively bloodless condition; but excitement causes a flow of blood to the capillaries of that vital organ, and if you retire to rest before it be toned down, you will be little likely to fall into a refreshing slumber. Indeed, it will in all probability be just the reverse; the very endeavour to sleep will banish it effectually for hours, if not for the whole night; there will be war between mind and body, and the latter will assuredly come off second-best. They sleep best who have neither worry nor care to annoy them; but one should try to get into a habit of being able to lay off care with one's office coat, and devoting the evening to reading or any kind of calm enjoyment. But what are termed "night-caps," or soothing drinks, should never be had recourse to. They are generally of a spirituous nature and composition, and therefore they are narcotics, and should not be needed for healthful sleep. They never did and never could tend to longevity.

There is a great and intimate connection between brain and stomach, chiefly through the medium of the pneumogastric nerve, hence heavy suppers are not conducive to healthful sleep. I do not believe, of course, in going supperless to bed, but the last meal should be a light one, and certainly an easily-digested one; a man is not in actual health if he needs a heavy supper to cause him to sleep. I would not advise such a person to purchase an annuity, for obvious reasons. A hearty supper will no doubt induce sleep, but it is not sound, blissful, child-sleep. It is turgid, brain-puffing, bloated sleep. A sow eats a hearty supper, and heavy slumber follows; a boa-constrictor swallows an ox, and goes to sleep for a fortnight. Neither animal is much to be admired. However, what I wish to impress upon you is the fact that want of good refreshing sleep is incompatible with longevity. One *must* learn to sleep well who would live long, and refreshing slumber is not to be obtained through the narcotism of night-caps or enormous suppers.

Regularity in meal-times is another thing one should study, if health would be retained and long life hoped for. I need hardly say that the food should be partaken of slowly, and that all excess or intemperance in either eating or drinking should be studiously avoided. It is very injurious to the health to stimulate the appetite at table by wines and piquant sauces. One should find one's appetite by legitimate means, before sitting down; it should be brought to the table, not manufactured there, or taken up as you do your table napkin.

As regards food some people—nay, but I may say very many people—oftentimes commit a grave error in this way: they sit down to table and eat whether they be hungry or not. Sit down to table by all means, but if you have little appetite, if the stomach tells you it needs rest, let it have it, and eat but very sparingly indeed.

Foods of all kinds are now-a-days shamefully and often dangerously adulterated; well, this fact, in my opinion, points the way to simplicity in diet. Constantly swallowing quantities of various kinds of animal, mineral, or vegetable impurities, must tend to shorten life in exactly the same way that breathing polluted air or drinking impure water does. The poor

suffer less perhaps from adulteration, in country places at all events, than do the rich; in the country good bread, milk, and butter are still to be had, and scientific rascality has not yet found out the means of adulterating ox-beef, nor of manufacturing spurious new-laid eggs.

The air of large towns is, as a rule, injurious to the health, and I oftentimes wonder why so many people sleep in them. Travelling is very cheap and very rapid; a brisk walk or a lift in an omnibus takes a business man to a railway station in a few minutes; half an hour in a train takes him far from the harassing din and turmoil of the town, to quiet and peace, and into purity of air.

No one who cares to live long, or be healthy and happy in the years that are granted him, can afford to forget the many atmospherical causes of disease, such as sudden changes of temperature, extremes of heat and cold, wet and damp, &c. One should be always prepared for these; to be so one must in some measure make clothing a study. Light woollen clothing should nearly always be worn; it can seldom in this climate be safely dispensed with. If possible, the dress worn by day in summer should be changed for warmer garments before the chills of evening set in, more especially if one has to be abroad.

Regularity and prudence in taking exercise I have always enjoined. It should not be laborious, nor monotonous, certainly never fatiguing or a penance. Exercise that feels a penance is positively injurious, and I never penned a truer remark than that. Both the mind and the body should be benefited by exercise: that cannot be unless the exercise is pleasureable.

But a person not only desires to live long, but to retain his faculties and senses; how, then, are we to do this? why, by exercising them regularly, but never to the verge of fatigue. Take the eye-sight for instance. Would you preserve it? Well, do not forget that to a great extent that beautiful optical instrument, the eye, is presided over by muscles which not only alter its direction, but even its focus; the eye, then, that is used not only to read small print, but to discern objects at a distance, is the one that, apart from the dimness incidental to old age, is likely to last the longest. And the same may be said of the ear; acuteness of hearing may be cultivated in youth by civilised beings just as it is by savages; and where it is so, it is seldom lost till advanced old age. This species of aural exercise, however, is out of the question in towns; but wherever one lives the organ of voice can be cultivated and exercised. Music of all kinds, and the practice of singing especially, are great aids to health, happiness, and longevity.

Mental exercise is favourable to long life, and even under adverse circumstances a man with a well-trained mind will live longer than a lout: the former has something to fall back upon, the latter depends entirely on external impressions. I think that Euclid and algebra should be (within bounds) as much studied by girls as by boys; even the puzzling out of anagrams, riddles, enigmas, &c., should be encouraged, and above all original composition and the writing of verses. In this latter respect English children would do well to take a lesson from the Scotch, for in Scotland one might almost say with safety that there is a "poet" in every large family. Mnemonics, as a branch of study, is greatly neglected at schools; in fact it is a science of which, as a rule, teachers know very little.

Thousands of people annually ruin their constitutions by simply swallowing too much medicine. It may seem a strange thing for a medical man to say, but it is nevertheless a fact. It is a dangerous thing to fly with every little ailment to the medicine chest. The use of tonics, unless under medical advice, should be discountenanced; a tonic is sharper than a two-edged sword, it is a tool that needs to be used with caution. There are now, I am sorry to see, some aërated waters coming into use which contain the strongest mineral tonics, that are apt to accumulate in the system with the most disastrous results. They should therefore not be drunk *ad libitum* as to quantity, or without guidance as to quality.

Rest should be taken with great regularity. I have already spoken of nocturnal rest, but one day in seven should be set apart for the complete rest of both body and mind. Independent of this, all who can afford it should take an annual holiday. Travelling is cheap, and two weeks or a month's relaxation from care and business cannot make a big hole in the purse of one who works well all the rest of the year and knows how to economise time. Innocent pleasure and wholesome recreation conduce to longevity. All work and no play sends Jack to an early grave. Recreation is to the mind and nervous system what sunshine is to the blood.

As a physician, I must be allowed to say just one word about the quieting, calming effect of religion upon the mind. The truly religious make by far and away the best patients, their chances of recovery from serious sickness are greater, and so is their chance of long life, simply owing to the power they have of submitting themselves quietly, yet humbly and *hopefully*, to whatsoever may be before them.

A HOLIDAY RAMBLE THROUGH HEVER AND CHIDINGSTONE.



WITHIN an easy drive of Sevenoaks, in the district of the Weald, lies the little village of Hever. It is almost concealed in an ambush of trees, and has little to recommend it for a dwelling; but, nevertheless, it can boast of a fine church, and also of a castle which is famous for being the birthplace of one queen and the last residence of another.

The village had its name from a family called Heure, who lived at Hever, near Northfleet; but which of the members first possessed the manor does not appear to be known. In the reign of Edward I. it was divided between Sir William de Heure, Sir Ralph de Heure, and his son Ralph. The portion of the latter seems to have been claimed or coveted by the Abbot of St. Austin's, near Canterbury, for the archives of the abbey record several disputes about the property between them. The quarrel, however, was at last settled in 1276, Ralph consenting to hold his land under the abbot by the service of the fourth part of a knight's fee, and on this condition the ecclesiastic granted it to him and his heirs for ever. But Ralph evidently became tired of his bargain, for his relative, Sir William de Heure, was in possession of the whole fee of the manor in the reign of Edward III.

The chief architecture of Hever Castle is of this date, for the king gave Sir William licence to rebuild and embattle his mansion house of Hever. The superintendence of these new buildings must have been a pleasant office to the old knight in times of peace. Though neither the rooms nor the courtyard of the castle are so spacious as those at Ightham Moat, they are equally perfect in all their details. The building is in the usual quadrangular form, surrounded by a moat which is fed from the river Eden, which flows through the eastern part of the parish. The imposing gatehouse is of stone, in a remarkable state of preservation. Its lofty tower is pierced with loopholes for the launching of missiles, and a triple portcullis protects the entrance. For such a portico the courtyard appears absurdly small, but the size is redeemed by the interest of its character. It was painted by Calderon as a background for his picture, "Home after Victory," exhibited in the Royal Academy in 1867.

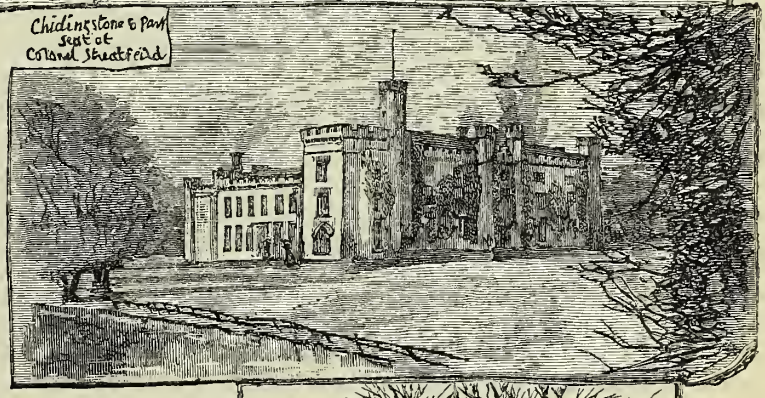


THE PORTCULLIS.



Sir William de Heure did not live long after the completion of his moated mansion, and on his decease the manor of Hever was divided between his two daughters, Joan and Margaret. Joan, the elder, was married to Reginald Cobham, a younger son of the Cobhams of Cobham, and thenceforward her portion was known by the name of Hever







Cobham. After her death Reginald, Lord Cobham, inherited the estate, and from him it passed to his son Reginald, Lord Cobham, of Sterborough Castle, in Surrey.

Margaret's portion was also distinguished by the name of her husband, Sir Oliver Brocas. It was called Hever Brocas; but the necessity for these surnames soon disappeared. On the death of Margaret, Lord Cobham of Sterborough purchased her moiety of the manor, and the two parts were thus reunited.

Lord Cobham died in 1404; and some years later, in the reign of King Henry VI., his grandson, Sir Thomas Cobham, knight, sold the property at Hever to Sir Geoffrey Bulleyn, a wealthy mercer of the City of London, who was Lord Mayor in 1459.

Sir Geoffrey belonged to an ancient and honourable family, originally of French extraction, who had settled in Norfolk. His wife was the eldest sister of Lord Hoo and Hastings, and by her he had one son, Sir William, who resided at Bleckling, in Norfolk.

Sir William Bulleyn was the grandfather of Queen Anne Bulleyn, who was the daughter of his son Thomas.

Sir Thomas went to reside at Hever soon after his marriage with Elizabeth, the eldest daughter of Thomas Howard, Duke of Norfolk, and there his three children were born. The improvements commenced by Sir Geoffrey were carried on by him, and when they were finished he dignified his moated mansion by calling it a castle. Sir Thomas was happy in his marriage, and prosperous in his fortunes. The peace of Hever remained unbroken till the death of the lady Elizabeth, which unfortunately took place during her husband's absence. This was the first dark cloud which gathered over the little castle. The orphans could ill spare their mother when she was taken from them. Sir

Thomas scarcely knew what was best for their welfare. He kept Mary with him to order his house, provided Rochford with a tutor, and committed Anne to the charge of the king's sister, who had just been married to Louis XII. The queen took her to France, and when she became a widow, removed her into the service of Queen Claudia, the wife of Francis I. After the death of this princess, Anne went to attend the Duchess of Alençon, with whom she remained until her return to England. She found many alterations in her old home: a stepmother superintending the household, her sister Mary was removed by her marriage to Carey, and her brother Rochford was absent at Oxford. She, however, seems to have found amusement in her books, her embroidery, and the garden at Hever, where Henry VIII. is said to have seen her first. The king, we are told, went back to Westminster, and informed Wolsey that he had been discussing with a young lady who had the wit of an angel, and was worthy of a crown. She left Hever to become a maid of honour to the unfortunate Queen Catherine of Arragon, and while in this situation her art and address brought about the divorce of her royal mistress. Anne evidently retired to Hever during the progress of the suit, and there the king made her frequent visits. It is related that he and his attendants often stuck in the mud on the way thither, and were obliged to sound a horn to summon the inhabitants of the castle to their assistance.

Hever Castle is probably little changed since the days when Henry VIII. went there to woo Anne Bulleyn; the main features of its outward appearance and the surrounding scenery are the same. The stables, with sleeping chambers above them, and a curious long gallery running along the front, and several of the principal apartments, are unaltered, although they are emptied of their antique furniture, and much defaced by the hand of time.

The Long Gallery is the most interesting of these rooms. It is very long, low, and narrow. The sides are of panelled oak, and the ceiling was evidently at one time ornamented in a similar manner. On one side is a recess, probably designed for the occupation of minstrels, or perhaps used for a chair of state when the king was present. It now contains an ancient bedstead, adorned with heavy, faded, yellow hangings, called the bed of Anne Bulleyn. It formerly stood in a small chamber said to have been used by her, which has some roughly-carved panels over the mantel-shelf. At the end nearest to the recess is a large bay window, especially associated by tradition with Anne and her royal lover, nor is it difficult to imagine their conversation there in the twilight, or to fancy the Beauty of Hever watching his approach through the diamond panes, or waving him an adieu.

At the opposite extremity of the Ball-room is a trap-door in the well-worn oaken flooring, which on being lifted reveals a dark hole or passage, probably leading to a hiding-place for use in time of danger. It is now called a dungeon.

There is another show apartment besides the Ball-room, which is partly covered by a fine gallery. It is well lighted, and has a small room opening from it, which may have been either a pantry or an oratory.

Anne Bulleyn was privately married to the king on the 14th of November, 1532, and declared queen on Easter Eve in the following year. After this event it is likely she never saw Hever again; but how often she must have wished herself back in its seclusion! Scarcely had she become used to the dignity she had coveted before the charms of Jane Seymour eclipsed her own, and a reason was found for her removal. Better to have remained for ever in the obscurity of Hever, than to have lived in royal state for three short years, and perished upon a scaffold.

Lord Rochford, the heir of Hever, suffered with his unfortunate sister; and two years later their unhappy father, Sir Thomas Bulleyn, who had been created Earl of Wiltshire, was also laid in the grave, his death doubtlessly hastened by his bereavements.

The tomb of Sir Thomas Bulleyn in Hever Church was scarcely closed before his sometime son-in-law, the royal tyrant, seized upon his estates, and ultimately appropriated his family residence as a suitable retirement for another of his ill-fated queens.

The manors of Hever, Seale, and Kemsing, with the castle and park of the former, were made over to Queen Anne of Cleves in the thirty-second year of her husband's reign. She had them for the term of her natural life, but was subject to a yearly rent of £93 13s. 3½d., payable at the Court of Augmentation.

Her residence at the castle, which extended to a period of sixteen years, was undisturbed, unless by memories of her predecessor, whose more mournful fate she must have been thankful to have escaped. On her death in 1557 Hever reverted to the crown, but Mary, the then reigning sovereign, had no interest in its possession, and it was very shortly afterwards sold by commissioners authorised for the purpose to Sir Edward Waldegrave.

The Waldegraves were a Northamptonshire family; but the branch from which Sir Edward was descended resided at Borely, in Essex. As an officer in the household of Queen Mary while she was a princess, Sir Edward Waldegrave had obtained her patronage and esteem. His sufferings in her interests had also strengthened the relationship between them, for his known attachment to her cause had incurred the displeasure of Edward VI., or rather of his advisers, and, as a consequence, procured his confinement in the Tower. On the accession of Queen Mary he was released, and loaded with honours. In the first year of her reign he was made one of her Privy Council, and appointed Master of the Great Wardrobe. Soon afterwards he became Chancellor of the Duchy of Lancaster, and Comptroller of the Queen's Household. His royal mistress also employed him in many commissions of trust and importance, and gave him grants of land on easy terms. Hever was probably more of a gift than a purchase. But on the death of Queen Mary there came another dark cloud over his horizon. Queen Elizabeth had no love for the friends of her sister, and those who had enjoyed the chief favours of the late queen soon found they were to receive the

least grace from the new one. Sir Edward Waldegrave was quickly deprived of his honours and his offices, and sent to take up his old quarters in the Tower, where he died after a captivity of three years.

It was fortunate for his family that Queen Elizabeth did not take the estates as well as the liberty of Sir Edward Waldegrave. His eldest son Charles inherited his father's property without dispute, and passed it in his turn to his son Edward.

Sir Edward Waldegrave appears to have distinguished himself in some way, for he was knighted at Greenwich in 1607. At seventy years of age he took arms in defence of Charles I., and behaved with such courage at the head of the regiment which he commanded, that he was made a baronet by letters patent in 1643. He paid dearly, however, for his allegiance to royalty, for two of his sons fell by his side in the battles which were fought, and he lost £50,000 value in his estates.

Hever Castle is now occupied as a farm-house. Only two rooms are shown to visitors, those we have described, as the farmer naturally refuses to see visitors, finding it impossible to receive them and attend to his business. He, however, made an exception in our case, and told us all that he knew. If a man pays rent for a building as his dwelling-house, he cannot be expected to have it open all day and be subject to the intrusion of every curious stranger. The grievance appears to be a very old one, and came to a climax about fifty years ago. In 1828 two visitors made their way to Hever Castle. They had provided themselves with what they reckoned a due reward for the *cicerone*, but on their ringing at the gate they found there posted an announcement that, the family being greatly inconvenienced by visitors, a charge of 2s. 6d. was to be made for each person. The visitors declined to yield to what they called this exorbitant demand, and one of them wrote a letter to the *Gentleman's Magazine*, September, 1828, complaining of the conduct of the inconvenienced family. He concluded contemptuously with saying that "there was really nothing to be seen except two or three armoural coats in one of the windows, and a very indifferently executed painting christened Anne Boleyn."

Hever Church is built in a fine open situation at a short distance from the castle. It is dedicated to St. Peter, and is adorned with a handsome tower and spire which would have done honour to a larger building. In the reign of King Edward I. it was valued at fifteen marcs, and in 1650 it was described as a parsonage with a house and twelve acres of glebe land, which with the tithes were worth £77 per annum. John Petter was then incumbent, and Francis Lord Dacre was the patron.

Hever Church has no books earlier than the time of Charles I. The first entry was made in 1632, and signed by John Petter, rector. The second entry is the burial of Mr. Balaam, who is described as rector of some place; the name is not legible, but it is probably Hever. In this case we may infer that John Petter was inducted in 1632. He held this living during the civil wars and the Commonwealth, but he refused to conform under the new restrictions of 1662. There is unfortunately no record of his history. Calamy merely mentions his name among the ejected ministers of Kent; but it is the lives of such men as Petter which would throw most light on the religious history of that age. He had not come into the place of any Royalist clergyman, he did not require re-ordination, he had conformed many years before the Presbyterians, as they were called, had the supremacy, yet in 1662 he would not conform. There is every sign of his having been both an able and an ardent man. The books are kept with a carefulness which is rarely equalled in any of the registers of Cromwell's time. There is a sermon extant on the death of his wife, who seems to have been a very estimable woman; and he wrote a preface to a Commentary on St. Mark's Gospel, written by his brother, George Petter, minister of the Gospel in Bread, in Sussex. In this preface he compares the four Evangelists to four stately white horses drawing the triumphant chariot of the Gospel, whereon the Lord Jesus rides gloriously in this imperial seat throughout the world. After quoting what had been said of St. Mark and his Gospel by the Fathers and old writers, he gives an account of his brother, from which we infer something of the writer's own character. George was born in the parish of Sandhurst, near Newenden, and so he was a native of Kent. In the twenty-fourth year of his age he was presented to the Rectory of Bread, which he held for forty-four years. "He was," says the brother, "notably instrumental in effecting a great change in the hearts and lives of the inhabitants." It is added that he was "exercised with sundry trials and afflictions," so that he "withdrew himself from the affairs of the world, and conversed much with dead men in his study, delighting much in that learned prison." The commentary consists of two very large closely-printed quarto volumes. It is described as the largest of all the commentaries which had yet appeared in any language on any of the Evangelists. The author died before its publication, so that the care of it fell to his brother, who commends "these pious and holy labours to the dews of Zion," and dates "from my study in Hever, in the county of Kent, September 3rd, 1661."

On leaving Hever Church we drove to Chidingstone, which was about two miles distant. Chidingstone is one of the smallest villages in Kent, but it is so quaint and picturesque that it is one of the most remarkable. It consists of a short row of irregular houses facing the church, all of which must have been built in the sixteenth century, and each one has some characteristic of its own—a gable, a window, or a door—that would make in itself a study for an artist. About the centre is a building with an important entrance, and a fine carved mantel-piece in its little best room, which was probably the dwelling of the priest or the squire in Tudor times. At the right end is also a house of larger dimensions than the others, which is now used as an inn; and so appropriate does it seem for the purpose, that we cannot help thinking that it has always afforded refreshment and accommodation to travellers. Mine host gave us

an excellent tea, and civilly showed us the curious Chiding-stone in his yard, from which the village takes its name.

The great Chiding-stone is large enough to fill a good-sized room. Nothing is known of its history, nor does it seem to have been noticed as in any way remarkable until attention was called to it in the last century by the antiquary Grose. He supposed that it was of the same kind as the consecrated rocks in Cornwall where the Druids worshipped. He also records the tradition of this place, that here the priests used to hear confession and *chide* the people for their misdoings; but this tradition has evidently originated from the attempt to get a meaning for the name. The stone apparently is a natural formation; but if it ever were hewn, or bore any inscriptions, all such traces are now effaced. Grose describes it as standing in a farmyard.

The manor of Chidingstone was formerly divided into two, which were respectively called after their owners — Chidingstone Cobham, and Chidingstone Burghersh. The former was part of the property of the Cobhams, of Sterborough Castle, and remained with them until the middle of the reign of Queen Elizabeth. Then their descendant, Thomas, Lord Burgh, was compelled to sell it and other estates to Richard Streatfeild, a gentleman residing in the parish, in consequence of the expenses which he had incurred in the queen's service. The family of Streatfeild had resided at Chidingstone since the time of Henry VII. Chidingstone Burghersh also passed into possession of the Streatfeilds about the year 1700, and thus the two manors were once more reunited under one owner.

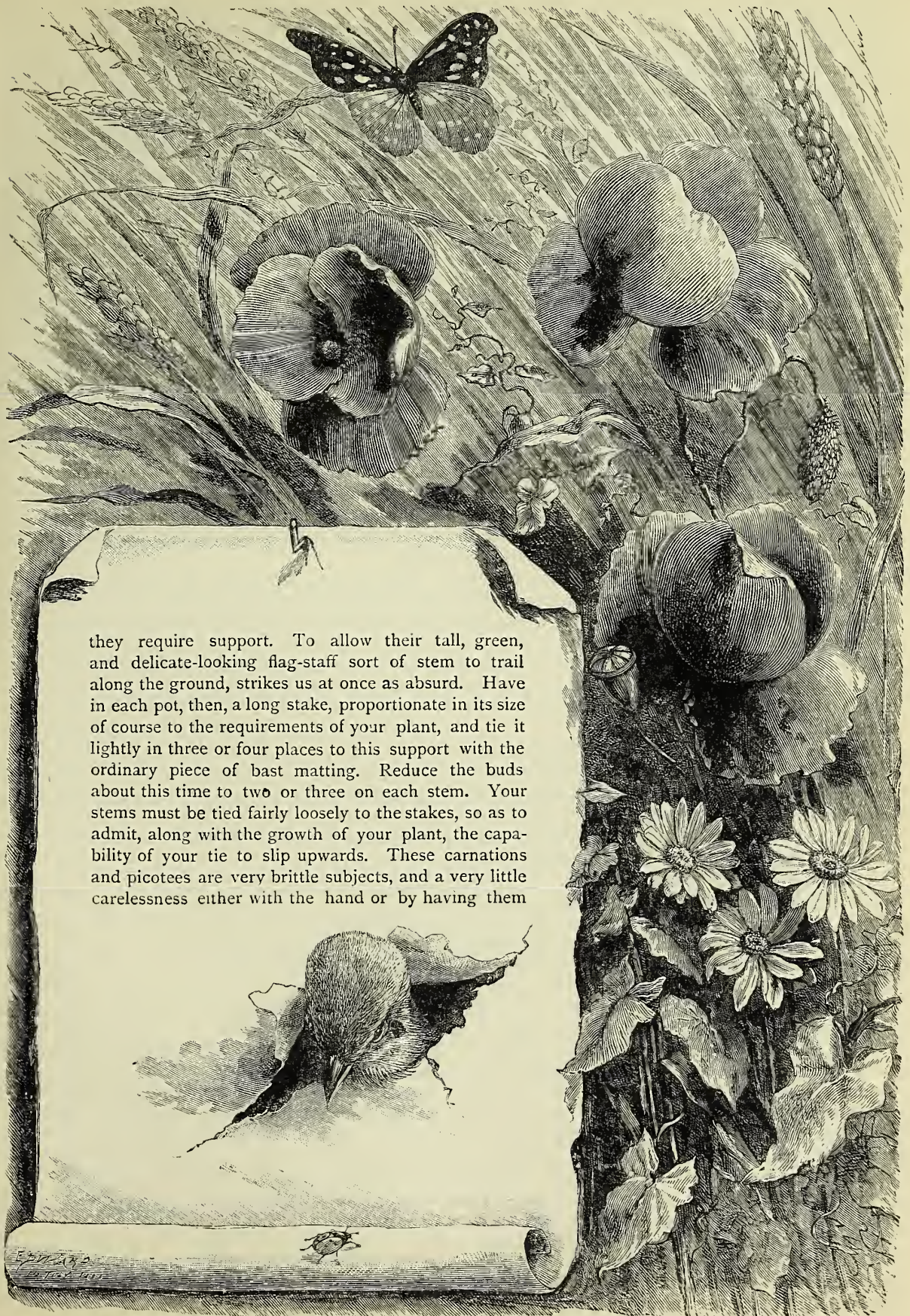
Burghersh — vulgarly called Burwash — was the name of an eminent family who possessed this part of Chidingstone in the fourteenth century. Robert de Burghersh was Constable of Dover Castle during the reign of Edward I., and Bartholomew held the same honourable office under Edward II. and Edward III. The latter prince seems to have shown him much favour, for he was frequently employed by him in embassies of importance, and was with him at the famous battle of Crecy. A short time before his death he was also made Constable of the Tower of London, whither he must have gone with strange emotions, since he was confined there for some time in his youth for taking the part of the Despencers. Bartholomew, his son and heir, was also in high esteem with the king for his courage and military skill, and on the institution of the Order of the Garter he was made one of the Knights Companions.

The church is a handsome building, with a good tower; but, having been recently restored, has little antiquarian interest. There are a few old slabs, chiefly recording the names of Streatfeilds, but no monuments of importance.

GARDENING IN JULY.

TO any ordinary mortal, save the haymaker or the well-bronzed devotee of our delightful craft, there is something overpowering in the very idea of "gardening in July." It sounds about as inviting as the notion of iced Seltzer-water on Christmas Day. But, on the other hand, we must recollect that we gardeners are not ordinary mortals. We do not like to sit with our hands before us, for if ever it held true that if any man work not, neither shall he eat, it holds true with the garden, the orchard, and the field. Now, when the height of the summer has been reached, we so often hear it said *apropos* of any proposal for a paper on gardening at this season of the year, "What possible suggestions can there be to offer now that everything is planted out, and bedded out, and when all our flowers, our fruit, and vegetables are in full display and luxuriance?" All this no doubt sounds very plausible, the idea probably being that, having sown, it now only remains to sit down, gaze at the flowers, and eat the fruit. But certainly a garden that from the 1st to the 31st of July was only looked at would have a very wonderful appearance by the end of that time. Only imagine leaving all our hedgerows to take care of themselves! The "Local Board" is very properly empowered to come down upon us if we allow our hedges to straggle across the path that probably divides our garden from the high road. Soon after Midsummer, then, have the hedges all round neatly and evenly trimmed with your shears. It is a hard, a dusty, and a hot piece of work, and as a rule we contrive to go through it only once in the course of the year. If, then, this tedious process is gone through in the middle of May, you will find it necessary to repeat it in the middle of July. It is for these heavy operations, when the borders of our gardens are strewn all round with the thorny boughs and branches of the hedges—and which, by the way, we can only burn afterwards—that our gardener generally asks for a little extra assistance, so that as all this entails additional expense, which perhaps not a few of us can ill afford, we prefer so to contrive that our hedge-cutting comes as Christmas does, "only once a year."

This gay month of July, then, finds us perhaps watching with some degree of interest the progress that our picotees and carnations are making towards blooming. Nothing is more handsome and effective than a fine show of these clove-scented and elegant flowers. But in order to bring them to anything like perfection, they, unlike some of our hardier plants, want a good deal of care and attention. And first, from the very nature of their growth, it is evident that



they require support. To allow their tall, green, and delicate-looking flag-staff sort of stem to trail along the ground, strikes us at once as absurd. Have in each pot, then, a long stake, proportionate in its size of course to the requirements of your plant, and tie it lightly in three or four places to this support with the ordinary piece of bast matting. Reduce the buds about this time to two or three on each stem. Your stems must be tied fairly loosely to the stakes, so as to admit, along with the growth of your plant, the capability of your tie to slip upwards. These carnations and picotees are very brittle subjects, and a very little carelessness either with the hand or by having them

tied too tightly will make them break off short, to your utter mortification. And in addition to support along their stem, we must also give some protection from the fiercer rays of the July sun, or from the almost as frequent (during this month of the year) violent rain and hail storms, when the thunder is cannonading overhead. Here, then, our ingenuity must come into play. Some employ a little sort of tin umbrella; or again—for we ought to have said before that it is best to stand your carnation pots in a row on a long piece of board, as it is very important to keep out slugs and vermin of all kinds—we might manufacture a kind of awning which we could put up or remove at pleasure, by simply driving two tall stakes into the ground at each end of our flower-stand to serve as a support for our canvas covering. And once, say, in every dozen waterings or thereabouts, give them a little liquid manure (though not too strong) instead of the usual watering, as this will encourage the growth and development of your flowers. Unfortunately, also, our carnations are often given to bloom irregularly, that is to say, you may occasionally observe the opening petals of the flower making their appearance not uniformly, but on one side only, and the tendency therefore is to give an imperfect bloom. One remedy for this is to turn your plant about a little at times, so as not to let the sun's rays fall upon one side only, or mainly. Another custom is to slit the calyx (*i.e.*, the outer green covering of your bud) carefully a little way down on the undeveloped side with a fine pair of scissors. In order to further and insure the more uniform development of your flower, tie a piece of matting or worsted round the middle of your new bursting bud, and tear or cut down the calyx to the worsted line.

Among the dahlias, look well, especially after heavy storms, to the supports, and add any stakes that may be necessary, as sometimes the side branches as they extend are liable to break off. A little weak liquid manure is beneficial to the dahlias at times; but when the general watering is given, let it be a good one that will soak well into the ground all round. When the sun has gone off them, a good syringing is advantageous to the foliage. For any intended late display, all dahlias not yet planted out should at once be got out. Of course they have not got time to grow very large, and therefore they need not in this case be planted quite so far apart.

Going on, then, with our general notice of operations adapted for the flower-garden this month, let us remark that polyanthuses may be parted asunder and planted out, and fuchsias that are in pots may now either be plunged or planted out in the ordinary way. Indeed any little finishing touch may be given now to our bedding out in general. And for this purpose we have doubtless some time back grown a good stock of annuals, and are now able to plant them out here and there, or to move some to the vacant spaces on our borders or wherever a failure has taken place. Very likely this year we had, as we did in 1880, many seed failures, owing to the long dry spring, the continued absence of rain, and the piercing east winds; in many cases where there was an impatient anxiety to get seeds, whether of flowers or vegetables, sown by the end of the third week in March, a good deal of disappointment must have ensued. By the end of the first week of April whole rows of peas might have been seen half an inch above the ground, but completely yellow, and more resembling the colour of autumn foliage, while many other seeds failed altogether. We are inclined, therefore, to think that in most cases we shall, with the seasons that we have had of late years, run a better chance of success by being a little slow to anticipate the summer, rather than by a precipitate hurry to get everything in during the first favourable week of spring. Where we have a small greenhouse or pit, and are naturally desirous to have a floral display as long as we possibly can, and indeed half through—or sometimes entirely through—a winter, sow now in July such flowers as mignonette, stocks, and sweet-peas in pots. The mignonette, indeed, can with very little trouble and by successional sowing be got to bloom all the year round. One or two pots of it, as any one must have observed, will scent a whole greenhouse, and it is a great delight to have these in flower at the dead time of the year when our geraniums are all dormant, and our fuchsias perhaps are looking like pieces of dry stick.

This is the great month for budding roses. We have on former occasions given full instructions as to how to proceed in this most interesting process. We will only say briefly here, then, be careful in the selection of a day for your work. In the event of a long, hot, dry, and sultry or perhaps rainless month, there is certainly great reason to fear failure. But as of late years such a season has been almost unknown with us, we need not anticipate this cause of ill success. The day after a storm is perhaps the best to choose for rose-budding. By the middle of July or thereabouts, camellias will have set their bloom; and they may be, if you wish it, inarched according to the process described in our directions given in April last. The union of your two plants is generally effected in some six weeks or two months after your inarching has been accomplished. This is a good month, too, for the sowing of perennials and biennials, your sweet-william for instance, which is a most popular and gay biennial. They will not bloom this season, but if they are planted out as soon as they are of sufficient size, they will get strength enough to become hardy and will bloom next year. The sweet-william very often seeds itself, and you may be sometimes, in a fairly generous soil, astonished to find a second plant of this flower making its appearance near one that you have had some time, but which you may feel equally sure you had not sown yourself. Some small top cuttings may be taken off your chrysanthemums and struck under a hand-glass, but they will want a good deal of careful shading from the hot sun. You will thus perhaps have some good dwarf plants, which can either go in your borders or you can afterwards pot them off. We are always a little concerned about our chrysanthemum pots, because we know they are, for the most



"AND LET THY LOW BREATH MOVE ACROSS MY FACE."

"SLEEP" (page 499).

part, our last hope of florescence in the wane of the year, and with a little pains-taking they may be got to go on blooming up to Christmas, and contribute immensely to the gaiety, though not perhaps to the fragrance, of our green-house.

In our kitchen-garden this is always a hard month: the weeds alone are enough to occupy us. Sometimes our hands hang down when we see a bed that we had, as we hoped, quite cleared of weeds only ten days ago, now verdant with its horrid crop. But that bearbine *must* be got out all the year round whenever you are busy with your spade. Get it out by the roots, and burn it or give it to the pigs. Your dreadful chickweed also, if you allow it to get too far ahead, will seed half your garden over: pull it up early, and before it has developed its little yellow flower. Successional crops, such as spinach, peas, carrots, &c., may still be sown. Indeed, this month in the kitchen-garden is a strange admixture of harvest and seed-time. Those broad beans that are coming into flower should be topped, the strength is thus thrown into your beans; a little earthing up, too, will benefit them. Herbs should certainly be gathered and dried this month, instead of postponing it, as is so often done, till August or even till September, when they have got too old, and half their flavour has gone. We adverted to this quite recently. The celery and the potatoes, likewise, must be regularly and carefully earthed up. Neglect or delay in this means certain failure. Winter greens and savoys may also be planted out, and some may be pricked out from your seed-beds, as this will strengthen them for their later planting.

We are busy, too, in our fruit-garden, and let us hope in a very satisfactory manner. The strawberry season is at its height. Their gathering wants a good deal of care and discretion. Go regularly over your plants, and avoid jumping about from plant to plant merely to find the largest fruit. By this means you will pass many over; and strawberries, if allowed to remain on their stalks a day after they are thoroughly ripe, become rapidly rotten and useless. Lift the leaves well up all round as you gather, and this will reveal many strawberries concealed underneath, which at first, perhaps, you had no idea existed there at all. Careful walking, too, among your strawberry plants is very necessary. Clumsiness in this respect means not merely trampling fruit down, but very often the crushing of a plant itself. The runners have, of course, been removed before now, as to allow them to remain on would both weaken, diminish, and impoverish your fruit very materially. Cut them off, then, pretty closely. Next month we make up our new beds, but of that we must speak in its place. We have, of course, before this topped, that is, broken or cut the tall top shoots from our red and white currant bushes, to throw the strength into the rapidly-developing fruit below. But it is best and neatest to use the knife for this purpose, and not to break and tear off anyhow the top branches, as the writer of these pages has so often seen gardeners do.

The vine still, of course, wants almost daily attention. All shoots not really required should be removed. One joint beyond the grapes stop all the shoots, and take care that your fruit-bearing branches get plenty of support. Those shoots, however, that you intend to bear next year, you of course watch and train carefully; and for this purpose you should reserve only the strongest and best-shaped, having an eye always to the direction in which you see their tendency is to grow. Wall-fruit may very likely require a second thinning. Let us hope that, after the devastations made amongst this last year in the month of May, we may have better success in this harvest. There is, indeed, always this consideration in a fruitless season, that the trees cannot become so exhausted as they almost always must after a very prolific one. Indeed, we know it is so often said, and with much truth too, that after a good season the trees require a year to recover themselves. At the best, however, this is but a poor consolation, so we shall still hope that the next two months will amply fill not only our granaries, but our fruit-rooms.

RONDEAU: SLEEP.

HAPPY Sleep! that bear'st upon thy breast
The blood-red poppy of enchanted rest,
Draw near me through the stillness of this place
And let thy low breath move across my face,
As faint winds move above a poplar's crest.

The broad seas darken slowly in the west;
The wheeling sea-birds call from nest to nest;
Draw near and touch me, leaning out of space,
O happy Sleep!

There is no sorrow hidden or confess'd,
There is no passion uttered or suppress'd,
Thou canst not for a little while efface;
Enfold me in thy mystical embrace,
Thou sovereign gift of God, most sweet, most blest,
O happy Sleep!

ADA LOUISE MARTIN.

THE SEARCH AFTER PERPETUAL MOTION.

BY PROFESSOR W. STEADMAN ALDIS, M.A., COLLEGE OF SCIENCE, NEWCASTLE-ON-TYNE.

THERE is something fascinating in motion. Half the pleasure of a healthy existence is derived from or connected with motion. The exhilarating rush of the skater through the frosty air down the long canal, or the gentle gliding with which he describes elegant curves on his carefully-swept corner, the delight of a child in a swing, and of the youth in his bicycle, are all illustrations of this fact. To many persons a gallop on horseback is the best way of restoring the tone of the bodily system; and even the plunging of a yacht in the teeth of a north-easter is capable of becoming a source of pleasure. The worst of it is that the pleasure is for the most part short-lived, and that the exertion of keeping up the motion presently produces a weariness and pain which more than counterbalance the enjoyment. All the work of the world, too, as well as the play, is done by motion; but here the same rule comes in even more rapidly—the agent soon becomes weary of the work. Cannot we, perhaps, get perpetual motion without fatigue or exertion, and if not, why not? The question is analogous to another question popular among children, even among children of a larger growth—Cannot we eat our cake and have it?—but yet for many ages it exercised the world with weary disputations and attempts to answer it in the affirmative. "Yes, we can, we shall—when I have added one more link to my machine," was the answer time after time from some solitary student of occult laws of nature in the Dark Ages. But the missing link never was added, the perpetual motion never came, and to-day we know—at least, all trained and scientific mechanicians know—that it never will come.

The search after perpetual motion has not been in all ages a fruitless one for mankind. The early attempts to effect a transmutation of baser metals into gold, while they failed of their main object, helped to lay the foundations of the science of chemistry. Unsuccessful efforts to square the circle, as it is popularly termed, or more correctly to discover by geometrical means a square whose area is exactly equal to that of a given circle, led mathematicians to many valuable geometrical facts. Similarly, the labours of mechanicians after a machine able to move for ever without external interference, were not without results capable of being applied in the invention and construction of the spinning-jennies and power-looms of more modern times. The day for all these problems is long gone by; no one need now flatter himself that his energies can be usefully employed on their solution; but we must not therefore forget that we owe a debt of gratitude to the men who, in their blind devotion to an impossible idea, helped unconsciously to marshal the forces of science for the conquest of the world.

A student taking up a modern treatise on mechanics, will find it stated as a first law of motion that a moving particle will continue in motion with uniform velocity for ever, unless its motion be checked by some external force. He will see in this law an apparent contradiction to our statement that perpetual motion is an impossibility. The contradiction is, however, merely on the surface, and disappears when we come to examine what was really sought by the mechanicians of the Middle Ages.

If we set a wheel to rotate round a horizontal axis whose ends rest on well-oiled supports, the wheel will go on turning for a long time. If the same wheel be made to turn in the exhausted receiver of an air-pump, it will continue to move for a much longer time. If we could quite get rid of the friction of the axis and of the resistance of the air, the wheel, as far as we can tell, would go on for ever. This is in accordance with the law of motion quoted above. Suppose, however, we fasten a string to the axle of the wheel, so that, as the wheel turns, the string coils round it. Let us also put a small weight at the end of the string, and set the wheel in motion. As it revolves, the string coils round the axis, the weight ascends, and we shall see the speed of the wheel gradually diminish until presently it stops, and the next instant begins to turn in the opposite way, and continues to do so until it gets back to its first position. However well oiled the bearings may be, the motion is no longer perpetual, the reason being that the weight hanging to the string exerts a force which tends to diminish the velocity of the wheel. We have, in fact, not been contented with letting the wheel move itself, which, if hindrances were removed, it might go on to do for ever, but have tried also to make it move something else, and that we find it refuses to do unless the force which started it be repeated at intervals. This latter is the kind of motion which was meant by the words "perpetual motion." What was wanted was not a luxurious ornament to go on ticking or rolling without affecting anything else, but a useful drudge which should do work without help and yet never stop, a kind of machine which we now know to be impossible.

The reason of this impossibility will appear from a few simple considerations of experience and theory.

If our student of mechanics goes on to read the treatise we have supposed in his hands, he will come across two more laws of motion. The first of these is, that the amount of motion produced in a body by a force is always greater or less in exact proportion to the force. If one player strike a cricket-ball with twice the force exerted by another player, the ball will start off in the first case with double the velocity which it has in the latter. The second law is, that

when two bodies act on one another, the first must act on the second with an equal and opposite force to that with which the second acts on the first. Thus, if a cart is drawn along a road by a horse, the horse is pulled backwards by the cart with exactly the same force as the cart is pulled forwards by the horse. When a man jumps upwards he kicks the earth downwards with the same force as the earth, so to speak, kicks him upwards. The man moves a good way up, and the earth does not perceptibly move at all, because the earth is so much larger than the man. The amount of motion which, spread over the body of the man, gives a sensible velocity to each particle, is quite imperceptible when diffused through the whole mass of the earth.

One effect of these laws is, that if any body in motion be employed to impart motion to another, it can only do so by giving up some of its own motion. For the first body must pull the second with a certain force, in order to move it; the second must pull the first backwards with the same force, and must, therefore, diminish the motion of the first by the exact amount by which its own is increased. Perpetual motion without a perpetual supply of force from some external source is as impossible in the case of a body employed as a motor, as it is to keep a purse well filled while continually spending and never putting in a fresh supply of money.

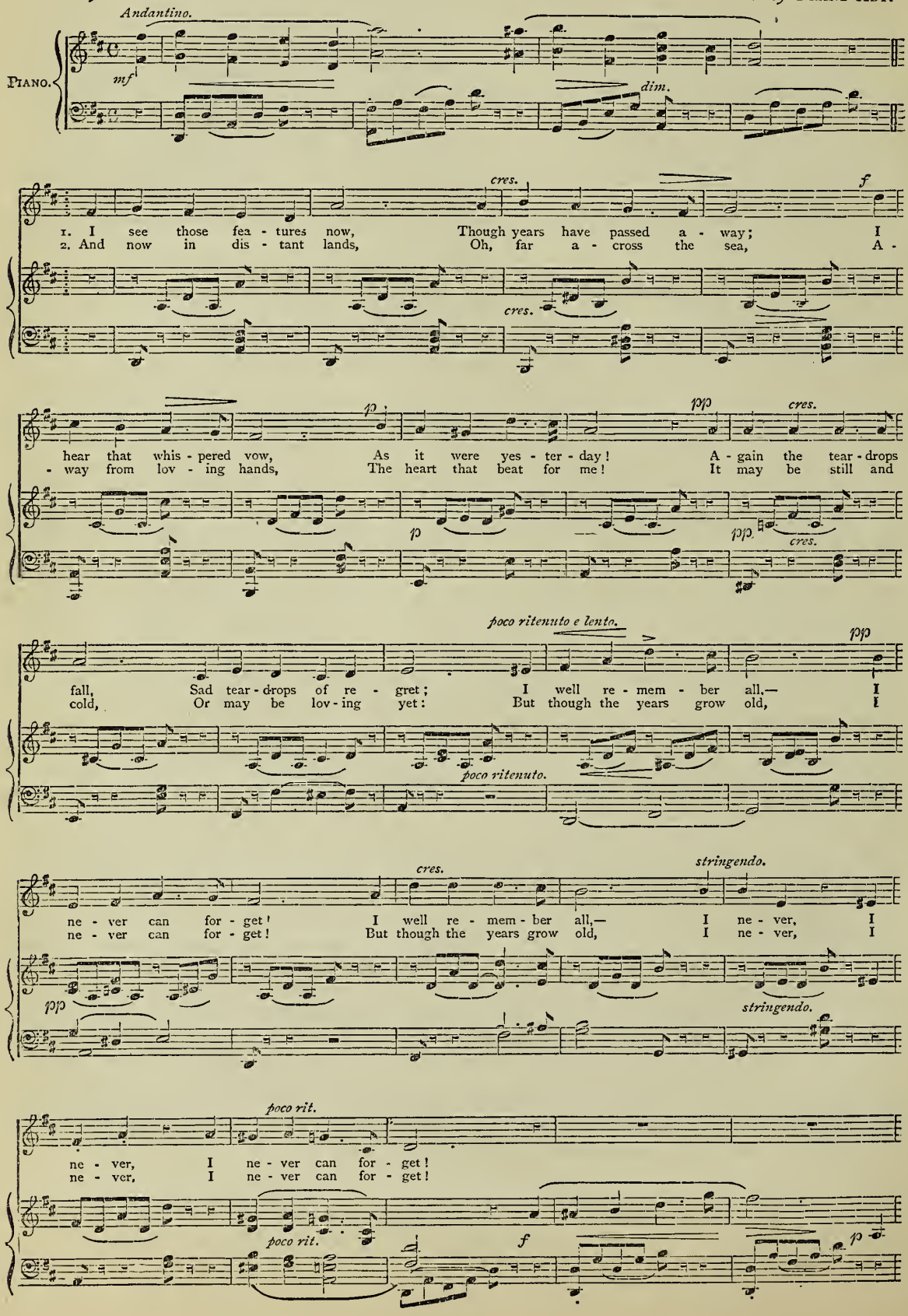
The principle on which the old machines for giving perpetual motion were mostly intended to act was that one train of wheels should set a second in motion, and that this second should either immediately, or through the intervention of some other machinery, repay the compliment to the first. For the reasons which we have seen, this process can never be permanently effected. However smooth the bearings may be, some of the energy or motion of the first train of wheels will be gradually lost in overcoming the friction of sockets and the resistance of the air. The motion communicated to the second system will thus be less than that originally given to the first, and the amount finally coming back to the first will be less still, for a similar reason. Thus, in time all the motion will be lost, to say nothing of the fact that such a machine will do no useful work on any external body.
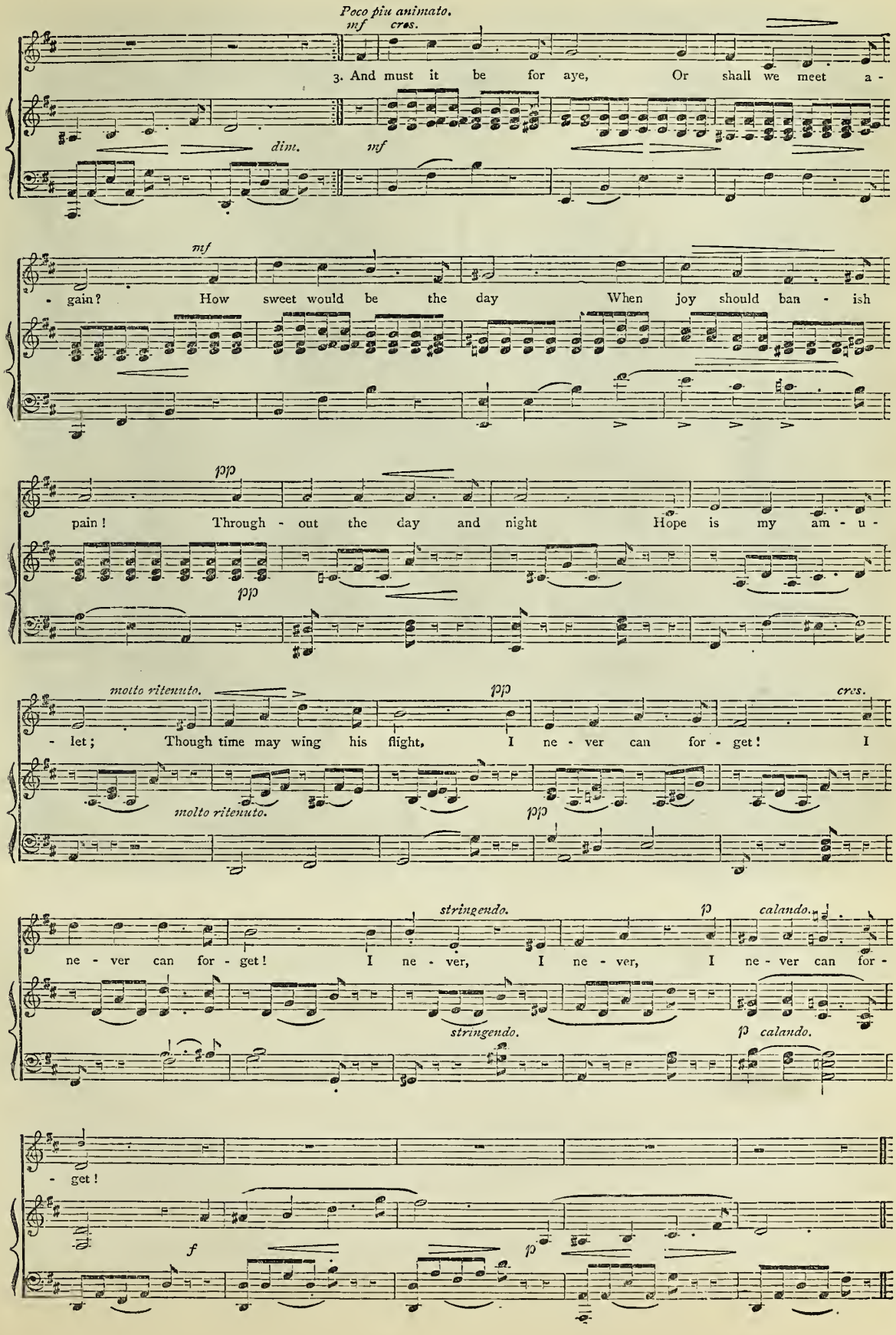
Modern experimental science has given us many new methods of producing motion. The heat of a fire operating on water compels the piston of a steam-engine to move with the regularity of clockwork, and with more than the strength of a giant. The action of an acid on a metal has been made to produce both heat and light, and motion. Even the mysterious something which gives the loadstone its attractive power, and directs the mariner's needle to the pole, has been made to yield the same. Electricity, magnetism, heat, motion, chemical action, have been shown by many experiments to be each deducible the one from the other. We might imagine that possibly the secret of perpetual motion is in our hands from some interchange of these forces. But, alas for our hopes! experiment has shown that a given quantity of any one of these forms of what is called "energy" will never yield more than a given quantity of any other; and that by whatever cycle we pass from the first form back to the same again, the final result is less than that from which we started—part of the original energy having always spent itself in wearing out the parts of the machinery, or heating the surrounding air.

If a machine, then, be employed to do work, as for instance to set in motion a body not moving to begin with, some part of the energy of the machine must be continually spent, and apparently lost. The steam-engine, as it lifts stroke by stroke its load of water from the mine, uses up for each stroke the heat in a certain quantity of coals. The maintenance for each minute of the brilliant electric light requires the destruction of a definite amount of fuel, or the consumption of a given quantity of metal by an acid. Nothing for nothing is nature's motto in all these matters. By our machinery we can turn energy or motion of one kind into energy of any other; but we cannot create it out of nothing. Even the pleasant motions to which we referred at the beginning of this paper are cases in point, for the human body is a machine which rapidly loses its energy if unfed. Man cannot work, or even play, unless he be supplied with internal heat by means of the food he consumes—heat which has originally come from the sun, and lodged itself in the plants which serve as food for beasts and men. It is to the stores of energy thus imparted to the earth by the sun acting on the growing trees in the ages when our coal-measures were formed, or acting on the earth to-day and forming the herbs which feed us now, that we must look for the possibility of getting *practically* perpetual motion. As long as our coal-beds remain unexhausted, we need never fear but that we shall be able to draw out the heat from that great storehouse, and turn it into motion as we will. What shall happen to the inhabitants of the earth when the collier shall no longer be able to win coal is a problem "beyond the range of practical politics." In the meanwhile it is well to remember that every journey made by an express train, every voyage of a Cunard steamer, nay, every fire we burn in our household grates, involves a dissipation and practical diminution of that great store of energy which the universe contains, the entire extinction of which would, as far as we can tell, be equivalent to the loss of all possibilities of physical activity, or even life.

I Never Can Forget.

Words by EDWARD OXENFORD. *Music by* FRANZ ABT.




Poco piu animato.
mf cres.
3. And must it be for aye, Or shall we meet a -
dim. mf
mf
- gain? How sweet would be the day When joy should ban - ish
pp
pain! Through - out the day and night Hope is my am - u -
pp
molto ritenuto. pp cres.
- let; Though time may wing his flight, I ne - ver can for - get! I
molto ritenuto.
pp
stringendo. p calando.
ne - ver can for - get! I ne - ver, I ne - ver, I ne - ver can for -
stringendo.
p calando.
- get!
f
p



WITH July, we hope to hail the advent of some hot weather, but in our uncertain climate such anticipations are by no means always realised, and our wardrobes must of necessity include good, serviceable, thick dresses, as well as washing materials. The most curious point of present fashions is that many of the substantial travelling-gowns are being made exactly in the same way as those of muslin, viz., with the close-set circular gaugings round the throat. We are running these gaugings to death, and no dress seems complete now unless half the skirt and more than half the bodice are closely gathered. A very usual style of making is with two deep flounces cut on the straight, and quite half a yard deep, headed by gatherings, say from six to eight. The bodice meets the top flounce, so as to appear to be cut *en Princesse*, but from the waist to the join there is a succession of close-set gatherings. The bodice has the fashionable gathered circular piece at the throat, reaching to the shoulders. I have seen this style carried out in serge, homespun, India muslin, washing-silk, and the well-worn satin de Lyon. Many of the most dressy class of costumes have front breadths of distinct colouring. One I particularly admired was a satin de Lyon of the Hussard blue, and a front breadth of soft cream satin. The bodice was a double-breasted coat, with long basques behind; the back was arranged as a train falling over box-plaited puffings of the cream satin, but the front breadth was all cream, gauged from the waist to the depth of a quarter of a yard with very close-set gatherings, and then allowed to fall softly in easy folds, finishing at the edge with more box-plaited puffings and gaugings, but above this again was another box-puff and a quarter of a yard of gauging. The rest of the breadth



was split in half, and caught back as a festoon over the soft falling folds, having a most graceful effect.

It is much to be regretted, if we are ever again to have really hot weather, that veritable washing-dresses have really gone out of date. Maybe it is that laundresses have lost their cunning, and that a dress washed is a dress marred. All or nearly all the cottons and muslins of to-day are of dark, serviceable colouring, which will keep clean for a season almost, and then are thrown away. The more Oriental-looking, the more faithfully copied from Japanese designs, the more fashionable are the season's cottons, and those with the pattern outlined in gold have found decided favour, and are to be seen on full-dress occasions. At a recent gathering one of the most *distingué* toilettes was a dark blue grounded cotton, covered with an Oriental pattern, and made up with a dark claret or ruby shade of the same material, in a plain tone, trimmed with gold lace—viz., pillow lace—run with fine ruby chenille, which appeared also on the parasol and on the bonnet. The latter was of gold straw, with Oriental ribbon of the two shades, and a dark blue and gold shot wing. South America and the Spanish main are being ransacked at the present moment for birds whose plumage will show to advantage on the fashionable bonnets of the autumn.

After the craze for very large cloaks, it has been curious to see how London shops have been deluged with small mantelettes; in Paris as in London, *La Mode* has not asserted itself in this particular, and for the time the wearers of large or small mantles are equally *en règle*. Tall slender figures copy as closely as they can the academical robes or the legal robes of their male friends, and long pendant sleevelets, merely a double strip of material, and wing-like gatherings at the back, are the most marked features

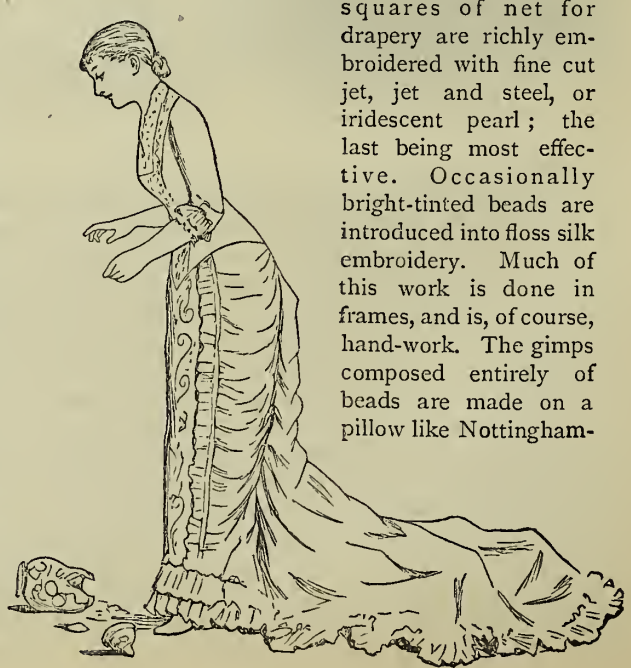


in these, together with very liberal trimmings of Spanish lace.

Velvets are being much worn both for evening and morning, and a particularly handsome dress to be seen at a recent reception was made of the old dark emerald velvet, with trimmings of water-lilies. Like most of the dresses of to-day, the skirt was so arranged that there was much fulness at the back of the waist, which is not so admirable in heavy materials, but in the soft silver-spangled tulle and similar stuffs it is becoming style, especially with the long laced stay-bodices now much worn by young ladies who remain faithful to short skirts, and make up for the want of length by the masses of flowers worn. Flowers are made up in a solid surface, say half a yard deep, and are laid transversely across the front, epaulettes of flowers being a decided novelty. Birds are worn as well as flowers, and a bride noted for her good dressing appeared recently in a cream brocaded velvet, with a tablier of opal and pearls; the trimmings, plaitings, flounces, &c., lined with pale pink; a mass of delicate humming-birds having apparently flown upon the entire front.

Any elderly lady troubled as to what gown to select for full-dress occasions, either morning or evening, cannot do wrong in deciding on a mixture of rich brocade, the design outlined in gold or steel—steel being the newer. The tinsel now sold, if at all good, really stands atmospheric changes, and these brocades bid fair to be as durable as those our grandmothers have handed down to us. It is no economy to choose a cheap one, and with such good stuffs it is unnecessary to have very costly trimmings. There are, however, most tempting ones, especially the mixtures of chenille and tinsel, whether gold, silver, or steel, in galons and fringes. Ruffles, jabots, and the small accessories of the toilette of that description require more and more consideration, for so much of the finish of dress depends upon them. One of the newest styles which I recommend to the notice of those who are given to make such things themselves, is a double row of six-inch wide lace turning down from the neck. The mode of making is to cut a band of net one inch wide, and to cut the lace in two lengths, each three times as long as the band. Divide the length with pins in four, and the band the same; gather the lace on a cotton, put the quarters to the quarters, and sew each piece of lace to the upper and lower edges of the band, tacking the folds which the fulness naturally makes here and there with fine cotton. A rosette or a flower is an improvement at the side; and the ruff, which can be made in white or black lace, should be buttoned at the back. For the same industrious fingers I have a suggestion in the way of dressing-gowns. Nothing is so comfortable as a Princesse gown; it is slipped on in a moment, and is loose and easy to wear; but in a French pattern I lately came across among some Parisian lingerie there is a great improvement, viz., a movable round cape, bordered with lace and fastened with bows of ribbon, and a small satchel bag attached by ribbons from the waist, useful for carrying a handkerchief. Close-fitting tailor-made jackets are worn on many occasions just now, and the latest novelty in the cut of them is the introduction of a small clerical vest, with a stand-up band round the throat. One of the chief desiderata among well-dressed English women appears to be to swathe the throat in such a manner as to have all the effect of being set in an iron collar. Perfumed artificial flowers are quite the fashion, and most of those worn at the throat are so treated. This result is brought about by a small bag of scented powder tied among the blossoms. The great point to be avoided is exaggeration; there is a decided tendency to wear too many flowers, in far too large bunches.

The bead-worker's star is certainly in the ascendant just at present, for bead passementerie and embroidery of all sorts is more popular than ever. The iridescent fringes and gimps are wonderful in their brilliancy, and buttons and necklaces are seen to match every tint. Pearls are much used for evening dresses, some of the galons and fringes being very beautiful. Large squares of net for drapery are richly embroidered with fine cut jet, jet and steel, or iridescent pearl; the last being most effective. Occasionally bright-tinted beads are introduced into floss silk embroidery. Much of this work is done in frames, and is, of course, hand-work. The gimps composed entirely of beads are made on a pillow like Nottingham-



shire lace. Grenadine embroidery is now made in any colour to match the gown. Quantities of lace are likewise used for trimming.

The taste of the present day is undoubtedly very extravagant. We see lingerie made up in the most costly manner. Dressing-jackets are wonderfully elaborate. Tea-gowns are made of the richest materials; and, noting the luxurious appointments and surroundings which greet us on every side, one is apt to speculate from whence come the means for all these "superfluities." The best taste, however, is generally unobtrusive in character, and anything outside the mark is better avoided.

Dainty little pocket-handkerchiefs with goffered borders, intended to be worn with a corner just peeping out from the dress-bodice, are much affected at present. Lace jabots and cascades, of antique valenciennes and the numberless new laces, are much used for finishing high gowns. Old lace is quite laid aside in favour of the wonderful imitations, as to wear *real* lace is, I regret to say, considered old-fashioned. I heard the other day of some Mousquetaire gloves one yard and a quarter in length. These are drawn on and then pushed carelessly down the arm in rucks or puckers. This is an age of eccentricities. We now hear of sunflowers by way of decoration. The small variety is rather pretty, but surely they are more at home in an old-fashioned country garden than as fashionable appendages.

The dresses that are illustrated in the accompanying engravings may be made up in either costly and rich materials, such as brocades and satins, or in such fabrics as the less expensive but still fresh sateens, foulards, percales, &c. The sateens are so beautiful this season that if judiciously selected, with due regard to the complexion and style of the wearer, the happiest results are obtainable.

The group in which two small children are the central figures, offers many suggestions in the making of dresses. The long redingote over the flounced skirt worn by the lady seated at the piano, is a popular style made up in plain and broché satin; the standing figure at her back shows off a pretty costume of nun's veiling in which gatherings play a prominent part. The new green-cream is a suitable colour at this season of the year, and is particularly pretty in soft materials. The little girls both wear sateen frocks. The remaining figure shows the new bunched-up train and also the basque of loops, lined with a contrasting colour, and headed with a band of trimming that defines a pointed waist.

In the outlined figures we find a dress made with a beaded plastron, in which both steel and gold beads play a prominent part; and in the other dress, suggestions for making up any material that has a printed border at one selvedge.

In the first group, arrayed for promenade, we have long and short dresses, suitable for garden parties, seaside or country walks, &c. The youthful matron holding her small daughter by the hands wears a painted dress. The revers on the skirt and cuffs, and the ornamentation down the front and round the neck of the bodice, are hand-painted; the tablier shows the new bouillonné flounces.

The garden party toilette is of pale blue shot satin and of broché satin. The new figured Madras muslin over satin would also be suitable for this dress. Suède mittens of the ever-popular tan or cinnamon-brown colour are much worn at this season of the year with this style of dress.

THE GATHERER.

A Useful Ventilator.

According to Dr. McKinnon, of Windsor, Ontario, perfect ventilation can easily be obtained by very simple means, in all rooms which are heated by stoves. The stove-pipe is surrounded by a cylinder of sheet-iron, having a diameter large enough to allow a space of two and a half inches between it and the pipe. Through openings in the lower part of this sheet-iron envelope the vitiated air of the room is admitted; it then passes upward as it becomes heated between the pipe and the cylinder for eighteen or twenty inches, at which point it enters an opening in the stove-pipe and escapes with the smoke.

Disc Scissors.

A novel pair of scissors has been devised by Herr Sievert, of Dresden. The blades are represented by two circular steel knives, which slightly overlap at the edges, and are pressed together by two spiral springs. The knives are fastened to a pair of wooden rollers with india-rubber rims, which grip and guide the cloth or paper as it passes between the knives, so that the latter may cut straight. These cutters are carried by two handles or levers which are held in the hand, and the cutting is effected by pushing the scissors forward, so as to cause the rollers to revolve.

Self-opening Tins.

Preserved meat tins and other sealed canisters are often very troublesome to open, and we are therefore glad to see that an easily-opened tin box has been devised by Mr. J. Featherstone-Griffin. Just beneath the lip of the box there is formed a swell or bevel, and the lid is fitted on above the bevel as shown in Fig. 1. To open the box it is only necessary to give it a few blows round the edge, so as to force the lid down upon the bulging part of the box below. The latter then acts as a wedge, and bursts open the cover as shown in Fig. 2. The fact that these tins are soldered

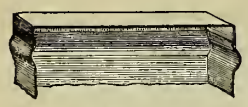


FIG. 1.



FIG. 2.

from the outside is also an advantage to them, for it prevents the access of unwholesome matter to the food inside.

A New Gem.

"Hiddenite" is the name given to a new gem which has recently been discovered in Alexander County, North Carolina, by Mr. W. E. Hidden. It is a variety of spondumene, and resembles the emerald, but has a more ethereal tint peculiar to itself. The green lustre is of a rare brilliancy, and is probably due to vanadium in the stone. It is hard, transparent, and rare, so that it has already taken rank as one of the most precious gems, equal in price to the diamond. This high value may, however, be partly due to the fact that it is the first known gem of pure American origin.

A Folding Bath.

Cupboard-beds have had their day, and are, seemingly, to be replaced by cupboard-baths, with the exception that whereas the former were movable, the latter will be stationary, unless the bath is taken to pieces so as to separate it from the pipes, which of course cannot be removed. Fig. 1 shows the ornamental article of furniture which really contains the bath; Fig. 2 represents the arrangement of pipes for the supply and withdrawal of the water, and Fig. 3 discloses the bath placed for use. To the bottom of the bath, A (Fig. 2), are fastened flanges of the elbows, B, whose horizontal arms extend through stuffing-boxes, C, on the hollow supports, D, and constitute the pivots on which the bath turns. One of the supports, D, has an adjustment, E, on each side, one for hot, the other for cold water, the two pipes being furnished with stop-valves, which may be seen in the back of the case in Fig. 3. The outlet is supplied with the usual plug and strainer, and a pipe, F, leads to the water or sewer pipe. The bath has a pair of hinged legs in front, which fold automatically when the bath is raised up. Of course, the bath need not be fitted within the "dummy" case; the apparatus could be fitted into an ordinary cupboard; though, if the invention has any utility at all, it would appear to be in the former rather than the latter form.

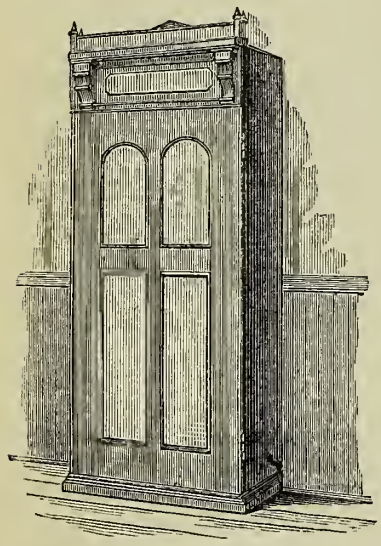


FIG. 1.

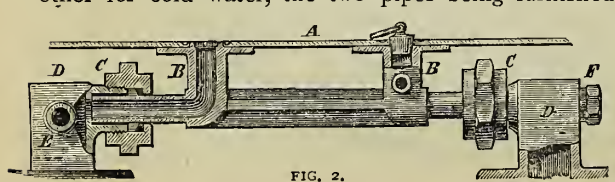


FIG. 2.

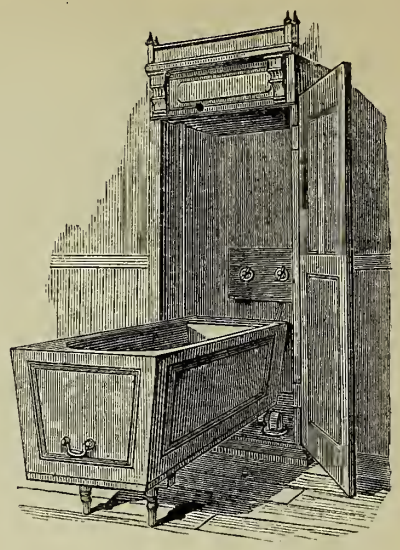


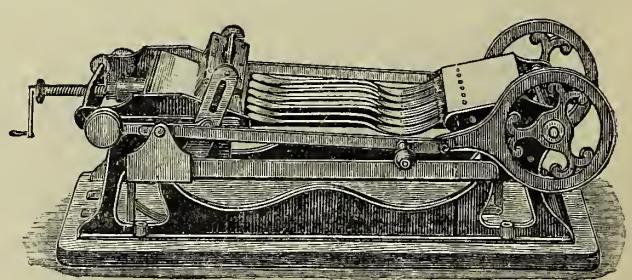
FIG. 3.

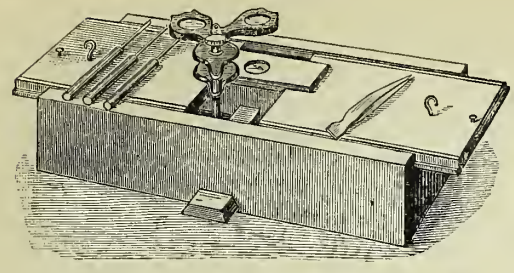
Birch-bark Rubber.

A French chemist has obtained a dense black gum from the outer layers of the birch-tree bark by distillation. It possesses all the ordinary properties of gutta-percha, and has the additional merit of resisting the deteriorating influence of air and the corrosive action of acids. This advantage makes it useful as an ingredient of india-rubber and gutta-percha, which it renders far more durable.

A Mechanical Fork-Cleaner.

A useful little labour-saving machine has been introduced by Mr. Hutchison in the form of a fork-cleaner. As shown in the wood-cut, it is constructed to clean six large or small forks simultaneously by the simple turning of a handle. The cleansing paste is first applied, then the turning of the handle actuates a pair of soft brushes, one above and one below, which traverse the forks from end to end and polish them on the way. In addition to the time and labour saved in the process, the forks are preserved from being bent out of shape or otherwise disfigured.





A Botanical Dissecting Microscope.

The little instrument represented in the accompanying wood-cut is the simplest and most effective application of the microscope for rough-and-ready use in the study of botany that field-naturalists and others could desire. It consists of a box contrived so that it will form a dissecting stage. The lid is divided across, and each half slides outwards, so that it may be readily adjusted a certain distance apart, exactly the length of the dissecting slide; this slide or stage —each end of which rests on a pit hollowed out in the upper surface of the lids—being placed across the interior space towards the far side of the box. A duplex lens (giving powers of 4, 6, and 10 diameters) is placed towards the near side of the box, and is carried on a brass focussing tube for perpendicular adjustment, sliding on an upright brass rod, or pillar, fixed to a movable bar at the bottom of the box for horizontal adjustment. Thus, owing to the ingenious construction of the instrument, and especially the lid, the student not only has *both hands free* when dissecting a flower, but has also a *rest for his wrists*. These are features of very great practical value. The Houston Botanical Microscope (called after its inventor, the well-known lecturer) is provided with two slides, one of cork (having one side plain, and the other with a cavity for dissecting seeds, &c.), and one of glass (one side plain, the other with a cavity for the dissection of objects in water), besides mounted needles, a knife or cutting-needle, and a pair of forceps. Altogether, this instrument is a marvel of cheapness and efficiency.

New Domestic Balances.

Two very neat domestic weighers have been devised by a French mechanician. They are illustrated in the accompanying figures, which almost explain themselves. The first is for weighing light articles, such as letters, and is merely a small steelyard with a sliding ball, and arrow-pointer, which is vertical when the balance is quite just. The pan is kept horizontal in all positions by the action of its supporting frame. The second balance is a variety of dynamometer, in which the weight compresses a spiral spring, and thereby moves a hand round a dial indicating the number of kilograms and parts of a kilogram that the body weighs.

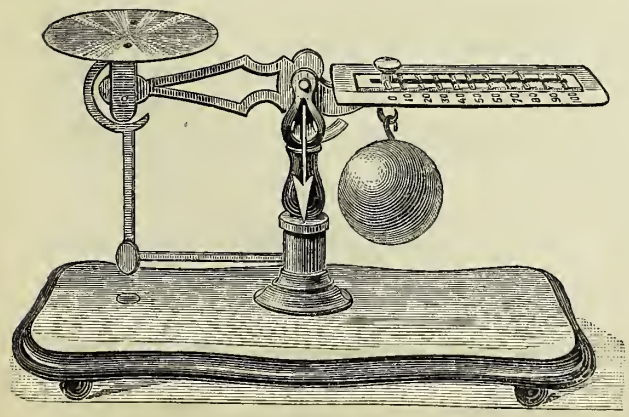


FIG. 1.

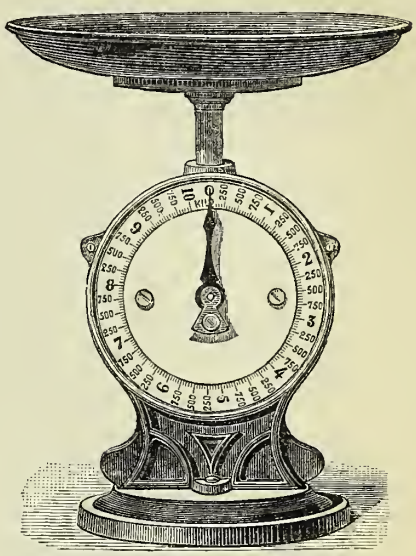


FIG. 2.

The chief merit of these domestic balances consists in the fact that they cause no loss of time in changing and adjusting weights.

Time by Electricity.

In Paris the town clocks are kept in time with an astronomical standard clock by means of pulses of compressed air sent at regular intervals along pneumatic pipes, and the plan is under consideration for London. Electricity, however, seems to be a more apt agent to employ for this purpose, and the electrically regulated clocks of Messrs. Barraud and Lund are found to answer well in Glasgow. The simplest system for dispensing time by means of the electric current which we have yet seen is that devised by Mr. F. E. Fahrig, an electrician of Southampton. This consists of a standard clock, shown in Fig. 1, which winds itself up regularly every hour by means of two contact springs, which close the circuit of an electric battery concealed in the bottom of the case, and send a current through an electro-magnet, which shifts a lever and ratchet wheel, thereby raising the weight back again to the position it occupied at the beginning of the hour. A battery



FIG. 1.

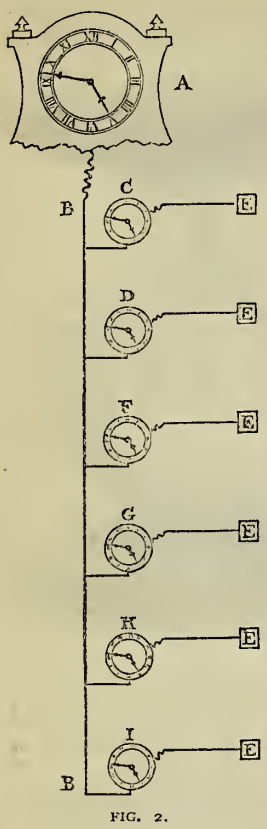


FIG. 2.

suitable for this work is constructed by Mr. Fahrig, and lasts for two years, when it can be repaired again in a short time. Fig. 2 illustrates the arrangement for distributing the time of the standard regulator, A, to different public or private dials, C, D, F, G, H, I. A conducting wire, B, leads from the standard to all the dials, which are placed in branch wires connected to the "earth," E. One end of this main wire, B, is in communication with one pole of a battery, and the circuit is completed by putting the other pole of the battery to "earth." This is done once every minute by the standard clock, and the current, passing through an electro-magnet attached to each dial, shifts the centre wheel which carries the minute hand one tooth. This wheel has sixty teeth, so that in an hour it has made a round of the dial, and the hour hand follows at its appropriate pace. So long as the batteries continue working with sufficient strength this system is automatic and requires no winding up, and but little care, for the mechanism of the dials is very simple. Moreover, when dynamo-electric currents are more common, there will not be any fear of the electric power failing, and hence it is probable that electrically regulated time is one of the conveniences of the immediate future.

Petroleum Soap.

The low price of petroleum, as compared with that of other fatty oils, has led to its use in the manufacture of soap. The chief difficulty to be overcome in the process of manufacture is the conversion of the limpid mineral oil into a solid; but this has been accomplished by Mr. Bastet, of Brooklyn, New York, by mixing it with a proportion of fatty or vegetable oil, and alkalising them in a special manner.

Black Potatoes.

A lady correspondent of *The Farmer* writes to say that she has produced a black variety of the potato, black to the very core; and, though presenting a strange appearance on the table, they are very nice indeed to eat. Some fifteen years ago a dark sort, known as the "black hearts," was cultivated in some of the north-eastern parts of Scotland, but these were not quite so ebony in looks, nor were they very good to taste.

A "Pocket" Boat.

The folding-boats invented by Captain De la Sala a few years ago have been recommended by several public bodies, including the Society of Arts and the Royal United Service Institution. They are especially useful for sporting and life-preserving purposes, owing to their portability and buoyant properties. The smallest of these, which is claimed to be unsinkable, measures 7 ft. long by 2 ft. 3 in. wide, and will carry two persons. Nevertheless, it folds up into a small, compact bundle, easily carried in the hand, if not the pocket, and weighing only 20 lbs. While upon this subject we may mention the American "canvas-boats," made of waterproofed canvas, and held to be more trustworthy than birch-bark canoes. Boats 12 ft. in length, designed to carry two persons, will also transport 600 lbs. of cargo, and draw only 4 ft. of water. They are packed in boxes about 38 in. cube, and can be made ready for the water in two or three minutes.

Molecular Music.

The beautiful researches of Mr. C. W. Crookes have made us familiar with the phenomenon of "molecular bombardment," that is, the battering of gaseous molecules in a highly vacuous space, and it has been suggested that this hail of atoms could be rendered audible by means of a delicate microphone. But such a detector is not really necessary, for Mr. C. R. Ross, of America, has found that the stream of electrified particles which in a Crookes' vacuum tube is repelled from a concave metal mirror so as to play on a sheet of thin platinum, not only hammers the platinum red-hot, like the blows of a smith upon the anvil, but also gives out a ringing musical note. The best effect is obtained when the mirror is negatively charged with electricity; only a feeble murmur being heard when it was positively charged. The pitch of the note seemed entirely due to the vibration of the platinum tongue under the impact of the molecules, and the sound resembled a musical version of the pattering of rain upon a window-pane.

Suspending Railway Seats.

The shocks and jars which inevitably attend railway travelling are, to a certain extent, deadened by the spring stuffing of our first and second-class carriages. In France the seats themselves are, on some lines, mounted on springs attached to the framework of the vehicle; but it has been objected to the plans hitherto followed, that while the body is being oscillated by the spring seat the feet remain planted on the solid floor, and thus a continual movement of the knees is kept up, which is very fatiguing on a long journey. To obviate this difficulty, M. Delessert has introduced a seat in which the floor of the carriage is also carried by the springs, so that both seat and foot-rest partake of the same oscillations, and the whole body of the passenger moves in one direction. This is done by rigidly suspending the floor between the two opposite

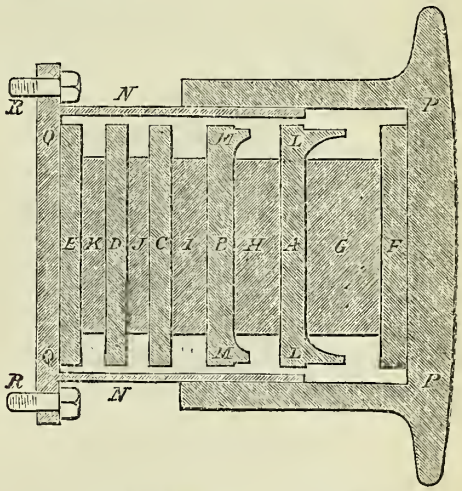
seats of a carriage from the springs underneath the stuffed bottoms of the seats. The contrivance has been highly successful on the Western Railway of France, and it is equally applicable to ordinary cabs and omnibuses.

The Spectrophone.

In his researches on the photophone, Professor Graham Bell found that when an intermittent beam of light was allowed to fall on thin discs of ebonite, metal, paper, or indeed any substance whatever, the disc emitted a musical note of a pitch corresponding to the number of flashes of the light per second. Subsequent experiments have led him to the conclusion that the best effects are obtained, not from discs, but loose porous bodies, like wool or dust, and especially if their colour be dark. Lamp-black, which combines both of these properties, gives out the loudest tone when the rapidly-eclipsed ray of light falls upon it. Liquids give, as a rule, feebler sounds than solids, and gases feebler still than liquids. Lamp-black has proved so serviceable that Professor Bell has actually adopted it instead of the selenium receiver in his photophone, and spoken words transmitted along the beam of light can be rendered audible by falling on a surface of this common material, if it be connected to the ear by a hearing-tube. In the photophone transmitter the voice of the speaker, as is well known, vibrates a mirror reflecting a beam of light; and the corresponding undulations of the beam breaking on the lamp-black cause it to expand and contract as if it were a sensitive body. The air around it is thus set into vibrations which are audible as a reproduction of the original sounds. This is an important discovery, for it dispenses with selenium, a rare and troublesome substance, as well as a telephone and battery, in the construction of the photophone. A totally new instrument has, moreover, also sprung out of these experiments. This is termed by Professor Bell the "spectrophone," and it is designed to analyse the invisible part of the spectrum beyond the red rays. Of course, the ordinary spectroscope fails here entirely, and the thermo-pile is resorted to; but the spectrophone promises to be superior. It consists in passing a rapidly-intermittent beam of light through the substance to be investigated, and forming the spectrum of it by the prism of a spectroscope. The observer's eye, however, is replaced by a lamp-black receiver connected to the ear by a hearing-tube. Then, as this receiver is moved across the invisible part of the spectrum, a sound will be heard in it, except at those parts where the substance under examination has *absorbed* the rays. These "absorption bands," as they are called, will be detected by the silence of the lamp-black receiver.

Artificial Seasoning of Wood.

In order to prepare timber for the sounding-boards of musical instruments, so that they will not alter in quality with the weather, Herr C. René, of Stettin, Germany, has introduced an artificial method of his own, which has the effect of ageing the wood in a few hours, as well as if it had been kept seasoning for years. The plan consists in subjecting the timber selected to the action of oxygen which has been enriched with ozone by electric discharges, and for this purpose the wood is placed on an iron grating in a closed boiler, which is filled with oxygen, ozonised by means of an electric current. The boiler is then gently fired and kept hot for fifty hours, when the seasoning process is completed. Herr René claims that instruments made of this wood have a remarkably fine tone, which, like the violins of the Italian masters, improves with age. He states also that sounding-boards prepared in this way have the property of retaining sound longer and more fully than the ordinary boards; whereas other modes of artificial seasoning impregnate the wood with chemicals and spoil its quality.



A Graduated Railway Buffer.

The concussion of railway and other cars against each other is often disagreeable to the passengers inside, as well as detrimental to the vehicle itself, and it is satisfactory to know that a means of tempering the shock is furnished by the new buffer of Lieut.-Colonel Hugh A. Silver. This device operates like a spring cushion, and reduces the shock by gradually offering a greater and greater resistance to it. The buffer is constructed, as shown in the accompanying section, of several discs of ebonite or hard rubber, F, A, B, C, D, E, separated by a bedding of soft vulcanised rubber, G, H, I, J, K. The layers of soft rubber are thinner towards the rear, in order that they may offer a greater resistance to compression. The front discs have flanges, L, M, round their edges, so that the soft rubber when under pressure may not bulge out too far; and the whole is enclosed in a metal case, N, N, having a buffer-head, P, P, of the ordinary shape. The buffer is fixed to the railway or tram-car by the base-plate Q, and screw-bolts R, R. To give an idea of the gradual action, we may mention that while the buffer is compressed one inch by a force of 4,000 lbs., it takes 40,000 lbs. to compress it two inches. India-rubber springs of this kind should be useful for a variety of purposes.

A New Kind of Embroidery.

Mrs. Oliver Wendell Holmes, Junr., of Boston, United States, has introduced a novel kind of broidery, which bears a relation to ordinary needle art similar to that borne by the pictures of the impressionist to ordinary paintings. There is a dash about the patterns which has a very striking effect. The work is done by combining floss-silk and worsted together with silk and cotton thread on a background of silk or satin. There is no regularity of stitch, or parallelism of the threads, or exact number of darnings. One of the designs is thus described by an eye-witness:—"On a dark blue silk ground, imitative of an evening sky, there stands out in the foreground the gnarled limbs of a New England fir-tree. Dark masses of foliage, made by the thick onlaying of masses of worsted, indicate the irregular growth. The sheen of the moon on the water is expressed by silvery lines of white thread, and off in the distance is the red lamp of some light-house." The scenes are highly realistic and remind one of the Japanese method.

Paper Belting.

The Japanese have long been famous for the manufacture of paper, especially the finer and the tougher sorts. One of their latest achievements in this line is the production of a paper belt suitable for driving machinery, and said to be stronger than ordinary leather. Now that European machines are being adopted in that country, this invention will prove exceedingly useful, for the Japanese are inferior tanners, and do not make good leather.

An Electric Velocipede.

The electric light has been applied to the bicycle before now to light up the road in front of it, but M. Trouvé, of Paris, is the first to do away with personal exertion and drive the vehicle itself by the electric current. He effects this by connecting each axle to a small electric motor of his own construction, in such a manner that the rotation of the motor turns the wheels. The motors are themselves driven by the current stored up in secondary batteries, carried by the velocipede. Faure's electric reservoir, which we describe elsewhere, will prove very useful for this purpose. Recent trials with an English tricycle made in the Rue de Valois, an asphalted thoroughfare in Paris, showed that the vehicle, which with its occupant weighed nearly 4 cwt., could be maintained by the current at the speed of an ordinary cab for the space of an hour. M. Trouvé is now at work on an improved motor, which he hopes will suffice to drive the tricycle at a speed of twelve or fifteen miles an hour; and this motor, combined with Faure's secondary battery, ought to make the electric tricycle a practical invention, highly useful to the invalided or the weakly.

Prize Essay on True Economies in Household Management.—Our readers are reminded that Essays in this competition, open to all readers of the Magazine, must be in the Editor's hands not later than July 1.

Prize Answers to Prize Acrostics.

By CHARLOTTE P. MITCHELL.

INTRODUCTION.

It was a dream; I stood within a cave
'Neath a lone ocean's dark and silent wave;
And near me, fearful in the semi-gloom,
I saw a dark gigantic figure loom—
The Mystery—the Sphinx! It towered there
Huge, voiceless, rigid, with a frozen glare
That turned my heart to stone. Silent I stood,
My blood slow coursing in an icy flood,
My brain half numbed with fear of what I saw,
And all my being steeped in mystic awe;
While at my feet, in shadow half concealed,
Six ancient vessels lay all closed and sealed.
So stood I there, till from the Mystery
Came a dread voice like far-off moaning sea:
"Mortal! in darkness sealed, lo! therein lie
The hidden things which thou must show or die!"
Then tremblingly I stooped and tried each seal.
Alas! what though I tried, and tried full well?
They had been closed and sealed with some dread spell!
And in despair I cried at last, "Reveal
The mighty word that shall dissolve this spell!'
Then a dread shadow o'er the Mystery fell,
And from its stone lips came the low reply:
Seek thou, and find—and *live*; or fail—and *die*!'
The jars were formed as in far antique times,
And round each marge were writ quaint runic rhymes;
I read; and saw through every mystic line
Faint ghosts of meanings twine and intertwine;
The which I followed, some dim clue to clasp,
But ah! they paled and glided from my grasp!
For ever changing, seemed they ever aught,
Whate'er I deemed them, yet, when caught, were nought!
Till wearied out I flung the vessels down,
And faced my torturer with a stubborn frown.
But came a Spirit radiant, who said,
"Patience!" then paled into a mist and fled.
I sought my task again, *this* was my key,
And all with ease I loosed each mystery.

I.

Loosed was the first; and blossomed forth to sight
A *Snowdrop* and a *Primrose*, whence a light
Soft exhalation rose, o'er which there drifted
Faint spirit-pictures that for ever shifted.
I saw another *Snowdrop*, fair to view
And hung with sweetest *Nectar*'stead of dew;
This vanished and I saw the gloomy tide
Of *Obi's* waters heaving dark and wide;
And Norman *William* on the further shore
Hunting the *Deer*. And now this scene was o'er,
And came, slow walking in a meadow green,
Ill-fated *Rizzio* with fair Scotia's queen.
Then changed the view to Afric's desert bare;
And on a tiny *Oasis*, smiling there,
Lo! a sweet *Primrose* bursting into bloom!
I reached to cull it—all was sunk in gloom.

II.

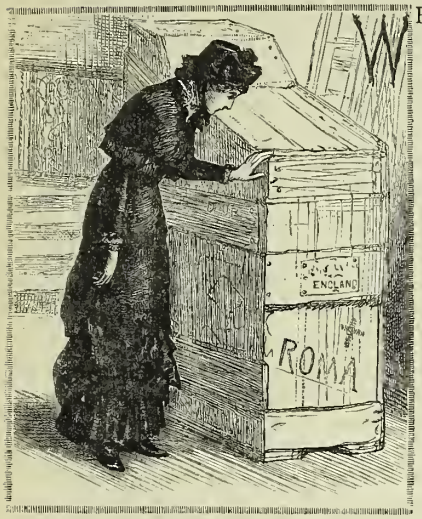
The second opened, and in thought I rode
T'wards *Reading* from fair *Grimsby*, with a load
Of grief, for I in reverie was *Reading*
A tale of hidden woe, of heart a-bleeding
Within the breast of one from whom I now was speeding
I looked upon the ring, an *Easter* token
Given me when our troth-word first was spoken.
The letters *A E I* entwined it bore,
And tears fell on them as I conned them o'er;
Till stooped I low with trembling lips to touch
The simple letters that here meant so much.
I now was seeking wealth that I might gain
Sweet love and respite from the waiting pain.
Nor finding what I sought, from town to town
I passed from *Durham* northward, and then down
To where fair *Isis* rolls her classic flood;
And at the last on India's shore I stood.
Here did I win the store of wealth and fame;
A very golden *Nabob*, home I came;
To *Grimsby* on the wings of love I sped,
And sought her home—alas! my love was dead!

THE PROBATION OF DOROTHY TRAVERS.

By the Author of "In a Minor Key."

CHAPTER THE TWENTY-NINTH.

ROME.



WHAT a change it was after cold, bleak Berlin!

Floods of sunshine, masses of flowers, soft-eyed dark-haired children, the sweet accents of Italy, a wealth of glowing colour, and everywhere the past, with its host of glorious traditions. Could anything present a greater contrast than did the two towns? Geoffrey, regretting as he did some of the advantages and many friends that he had left in Berlin, nevertheless revelled in the change—in the sun, in the flowers, in the past, and above all in the present of his new abode. He revisited all his old haunts—would wander for miles out into the Campagna, spending long days sketching, or stand for hours among the excavations—but his fellow-creatures he shunned. Hardly had he arrived before he was overwhelmed with invitations from English and Italians alike, but picnics, riding parties, moonlight expeditions, dances, balls, were all equally refused by him. If he could not have the one woman he wanted, could he talk vapid nonsense with those for whom he cared nothing? He was in no mood to listen to girlish raptures over the hoary glories of the Coliseum, to hear Byron and Shelley misquoted, or the Apollo called "charming;" and, in this misanthropic and churlish frame of mind, such society as he did seek was chiefly among the Italians, and those of his own sex distinguished for their mental superiority. His relaxations were the excavations. Into these he threw himself heart and soul, feeling often strongly inclined to take up a pick-axe and spade himself, and set to work in English fashion, as he watched the leisurely manner in which the Italian workmen dug, and loitered, and dug again, with the bright winning smile on their faces, as though Time must wait for them, if they only smiled at him.

What with his work, constant visits to the Barberini Palace to gaze on the sweet, intensely pathetic face of Beatrice Cenci, the excavations, and one thing and another, he had plenty to do, to cure him of his heartache. Nearly every day he would run against some old friend, and have to respond to the frequent question, "What? not married yet, Ingram? Wise fellow," and wonder whether in most cases matrimony were indeed the terrible venture his friends would have him believe.

Very soon after his arrival in Rome, he repaired to Harry's hotel in the Via Babuino, to fulfil his promise of "looking him up." He felt a curious fascination for this new acquaintance, who was the fortunate owner of what ought to have been his own broad acres, and he was pleased to meet him just about to sally forth, armed with a guide, and one or two other portentous-looking volumes, all of which the poor boy studied conscientiously, forgetting at the end of an hour every word, and above all, every name he had so laboriously acquired. He greeted Geoffrey enthusiastically.

"Ah!" he said, after a few words of welcome, "you know all these places; tell me something about the hounds here, will you?"

This was a subject on which Mr. Ingram could give very minute information, and he was able to answer all Harry's questions satisfactorily, telling him where to procure a horse, and winding up by informing him that the meet the following morning was at the tomb of Cecilia Metella.

"How odd it sounds, doesn't it?" said Harry; "fancy meeting at a tomb; but provided they meet somewhere it does not much matter where it is."

"No; besides which, this tomb in question is very generally known."

"Oh! yes. Some girl I met yesterday was talking about Cecilia Metella to me, and for the life of me I could not remember anything about her."

"That is not wonderful," answered Geoffrey smiling, "as there is very little known about her."

"I am an awful Goth though," continued Harry; "but I assure you I am quite confused and dazed with all the pictures, statues, churches, monuments, and so on that I have been looking at for the last five months; and as for the names!" and he held up his hands as much as to say that those were utterly beyond him.

"Then leave your guide at home," said Geoffrey, glancing at the big red volume under his arm, "and I will be your cicerone to-day, and we will ride out to this celebrated tomb, for you to see where it is."

"Ah! but I shall want my book; look here, there is an awful lot about Cecilia Metella and," in dismay, "a whole host of other tombs."

Geoffrey laughed again. "You are quite incorrigible with your guides," he said. "I can tell you as much about the tombs as it is necessary to know, so leave all those bulky volumes at home, and enjoy yourself for once without them."

"Can you really? then hang guides! Here, Antonio, take all these books, and put them in my room. You are awfully good to me, do you know?" he continued, turning to Geoffrey; "for I am sure I shall bore you dreadfully with my ignorance."

"I am willing to run the risk."

"By the way, I have a whole pocketful of letters of introduction here. Can you tell me anything about the different people to whom they are addressed? They are English and Italian. I shall not trouble the latter much, as I cannot speak Italian. But I suppose I ought to leave the others. Don't you think so?"

"Yes, it will make Rome much pleasanter to you. There is always plenty going on among the English, by means of which you can do a good deal of sight-seeing, with the agreeable diversions of picnics and luncheons."

"All right, then, I will leave the English ones. Here is the first. 'Geoffrey Ingram, Esq.;' do you know anything about him? I see he has something to do with the Embassy."

"Yes, I happen to know him."

"Well?"

"Very well."

"Is he a good sort of fellow?"

"That you must judge for yourself, as he is talking to you this minute."

"No, really? Ah! I beg your pardon;" and poor Harry stood covered with confusion and blushes.

"What for?" asked Geoffrey, putting out his hand for the letter which Harry had got for him.

It was from a very old friend of his, Mrs. Marjoribanks, who lived about five miles from Holme Regis, and who had known him ever since he was a little boy in petticoats. She recommended Harry warmly to his notice.

"He is a great favourite of mine," she wrote, "though of late years I have seen but little of him. He has laboured under great disadvantages, in that he has been under the sway of a strict, tyrannical father, who lived the life of a recluse, seeing no society, and who had not the sense to appreciate the really good qualities of his son. The consequence is that the latter has grown up shy and embarrassed, disliking society, and seldom out of the stables; but he is *really* nice and gentlemanly, and though anything but intellectual, still he has plenty of shrewd common sense, and was born to live in the country, where, I think, he will prove a first-rate squire. His father's death, last year, has made him one of our richest landowners, and I mean to keep an eye on him, and see that he does nothing to spoil dear old Holme Regis, besides doing my best to find him a charming wife. You are aware of my match-making propensities of old, and I know of a very pretty and charming girl who would suit him exactly. *Apropos* of matrimony, when am I to hear of a Mrs. Ingram?"

"We ought to be friends, Mr. Leonard," said Geoffrey, looking up from the perusal of this letter, "for we have one very strong bond of union, in the shape of Holme Regis, where I fancy we both first saw daylight."

"Are you Mr. Ingram of Holme Regis?" asked Harry, in amazement.

"I am Mr. Ingram, but not of Holme Regis; but my father was, which is something of the same kind, is it not?"

"But you remember it—you recollect the places all about? You know the country, don't you?"

"Every stick and every stone of it."

"And so do I. And don't you think, now, that there is nothing in France, or Germany, or Italy, or anywhere to be compared to it?"

"I don't go quite so far as that," laughed Geoffrey, "but I do say there is but one Holme Regis."

Harry was in ecstasies. What a prize he had found! a countryman, and who knew his home. What more could he ask? They rode out into the Campagna together, and once outside the walls of the town, on the green springy turf, treading under their horses' hoofs the pale purple cyclamen, starry jonquils, violets, and anemones, with which it was literally bestrewn, Harry felt himself a different creature. He entered eagerly into the question of the drainage of the Campagna, the Roman system of aqueducts—in fact, he showed himself what he was, shrewd and intelligent. The time passed quickly as the two discussed the sweet theme of Holme Regis, and Geoffrey, painful as the subject was even now to him, could not forbear from asking question on question about the old place.

"The last time," he said, "that I heard anything of it, was from Miss Travers, whom you know."

"Dolly Travers? Of course I do; I have known her all my life. And you are acquainted with her too?"

"I am an old friend of Sir Augustus, and have met her at Wrangham."

Harry's delight was so great that he was very nearly betraying his secret, but that his English reserve and caution came to his aid, and he continued the conversation tolerably calmly, only remarking—

"Is she not very pretty?"

"Very."

"And is she happy at home, do you think? You know she never lived there till she grew up."

"Fairly happy. She has lately lost a little brother, to whom she was devoted."

"So I heard. I mean, it was in *Galignani*;" and Harry stammered, for was not Dolly's letter telling him the sad news in his waistcoat-pocket at that moment?

But Geoffrey did not heed him; his thoughts were back at Wrangham. Once more he was in the schoolroom, holding Dolly's hand, looking into her sad eyes, wondering how she was.

"Do you ever hear of her now?" he asked, so suddenly that Harry coloured, as he stooped to adjust something at his horse's bridle.

"Sometimes," he answered. "She lived with our rector and his wife."

"Uncle Tom?"

"So you know all about them. They are awfully nice people, and were very fond of her; very different from her father, I should think."

But at this point Harry, afraid, if he continued the subject, of betraying himself, broke off abruptly, to remark on one of the many objects they were passing, and Dolly was not again reverted to.

This was only the beginning of a warm friendship which was to spring up between the two men, a feeling of admiring veneration on Harry's part, of a very friendly interest on Geoffrey's.

It was such a novelty to meet a young man with about fifteen thousand a year who was as unconscious of his own value as had he only possessed fifteen thousand pence, who always estimated himself far below his compeers, and who seemed to have no desire to shine in the world of fashion. It was apparently no part of his programme to hoist himself, by means of his money, into the top branches of society, where he would have been welcomed with outstretched hands, and offered probably a place near the pinnacle. That money was a very nice thing, and that he enjoyed the possession of it immensely, particularly when he thought of it as shared with Dolly, that he knew; but that all the cards of invitation that strewed his table at his hotel, from Italian princesses down to the insignificant Mrs. Smiths of the world, were mostly due to his large fortune and fine estate, never entered his guileless head. He thought every one was very kind, and that it was very jolly to know so many people, but at the same time, as he once naïvely remarked to Geoffrey, "I think it must be a mistake that Lady de Tracy has sent me a card for her 'at home.' I do not know her at all, and I expect she is not aware that my pedigree is not of very ancient date."

"Lady de Tracy knows perfectly well what she is about, my dear boy. That card is intended for you right enough. When you have learnt a little more of the world, you will soon find out what the 'Open sesame' is, which has caused this flood of cards and notes to flow in on you. Go to Lady de Tracy's by all means; it will be very good, and eminently select."

Geoffrey was sitting by Harry's table, surveying all his numerous invitations, and remembering the time when he used to take a boyish pride in counting all the cards that used to adorn his mantel-piece. His had not been the golden key that had unlocked the doors of society, but an almost equally effective one, his good birth and good breeding.

And Harry found sight-seeing in Rome a very different thing from what it had been in other Italian towns, and far more to his taste. He learned to leave his guide-books at home, and to trust his instruction to the many nice-looking girls who were sure to form part of every party he joined. And every one liked him. He was so unaffected, so merry, "So delightfully boyish and blushing," as one lady said; "So alarmed at all the smart people among whom he found himself plunged, and so relieved to find that they did not bite," as Lady de Tracy remarked to Geoffrey; "Such a thorough gentleman," as he responded; but one and all agreed that he was provokingly indifferent to the many pretty faces that were so numerous in Rome at that season. For through all the excitement, the going out, and the attentions he received from all sides, he never for one instant forgot Dolly. Her last letter lay always in his waistcoat-pocket, her photograph in a locket on his chain. He stoutly refused to give in his adherence to the reigning beauty of the Anglo-Roman society, mentally declaring that she was not to be named with his Dolly; and almost daily, like Geoffrey, he turned his steps towards the Barberini Palace to look at Guido's masterpiece, and to liken it to his darling, only hoping that she would never look so sad.

And the days turned to weeks, and the weeks to months, and still he stayed on at Rome. He had had another letter from Dolly, written from the Vicarage at Holme Regis. She had been ill, she said, but fortunately at home, and Uncle Tom and Aunt Mary had nursed her back to health, and she was enjoying her convalescence very much, lying on the sofa by the open window, with the sweet spring sunshine looking in at her, listening to the babbling of their dear old stream, and undergoing unlimited petting.

"I have been sitting under the cedar-tree, this morning, for half an hour in the sun," she wrote, "watching the water, and the dear little fishes, who kept on bobbing up their little heads to look at me, till I came to the conclusion that Undine was a very enviable personage, and Uncle Tom had some difficulty in preventing my taking up my old position on the stepping-stones. What fun we used to have, Harry! Can you believe it was only a few years ago? To me it seems a lifetime; and sometimes I wonder if you will find me the same Dolly you left, or be disappointed to see a long, thin-faced creature, as sober as the veriest old tabby, with but little of the kitten left in her. Do you remember when Aunt Mary used to say to us, before we sallied out together, 'Now, children, pray be discreet,' and we made ourselves quite unhappy, because we thought we never should be discreet? I have learnt it now; have you, dear? and do you think that some day, not I hope so very far distant, we shall settle down at Holme Regis as a model landlord and landlady? I cannot tell you, dear, how I envy you all you have seen, and are seeing. My table here is heaped up with books about Rome, and I am reading them all at the same time, and I want you to get them too, if you have not done so already: Schiller's 'Benvenuto Cellini,' Hans Andersen's 'Improvisatore,' Storey's 'Roba di Roma,' and Hawthorne's 'Transformation;' so you see you may safely tell me *everything* you do, for I know all about it, and some day we shall talk over Rome together, till I shall fancy I have been there myself. You ask me if I mind your going out and about, and enjoying yourself. Of course I do not. I am so glad every one makes so much of you, and that you are enjoying yourself. Your letters from Rome have quite a different ring in them to the Venetian and Florentine epistles, and we are all—Uncle Tom, and Aunt Mary, and myself—*delighted* to hear that you are taking to society. It is such a good thing for every one, and keeps one unselfish, or rather makes one less selfish than one is naturally inclined to be. There are so many nice,

good people in the world, men and women ; and, from what you tell me, you have made real friends among them."

At this point Harry, who was reading this letter for about the tenth time, stopped.

"It is really tiresome, my darling, not to answer my questions," he murmured to himself. "I asked her particularly to tell me all about her acquaintance with Ingram, and she never mentions his name. She must have liked him, nobody could help that. Well, now I will be off to Castellani, and see if I cannot secure that wonderful bracelet they were talking about last night, before any one else gets hold of it;" and Harry, folding his precious letter carefully, and placing it in a pocket in close proximity to his heart, turned his steps towards the well-known jeweller, to whom he was a frequent customer. Darling little Dolly—he always thought of her as the bright, round-faced little Dolly he had last kissed in the Wrangham Woods—was out of spirits and ill, and she would be pleased with this lovely bracelet, if he might only manage to secure it for her. It was yet early in the morning when, after a rapidly-concluded bargain, he issued from Castellani's shop, triumphantly carrying off the bracelet, and meeting pretty Mrs. Grey, who had arrived on the same quest, in the doorway. He held up the case containing his treasure.

"See!" he cried, "the result of being the early bird."

"What?" exclaimed Mrs. Grey, "you do not really mean to tell me that you, a bachelor, have actually been before-hand with me, Mr. Leonard, and have bought that dear, lovely bracelet on which I had set my heart? It is simply abominable of you. To think of such a thing when I—but tell it not—actually so far bemeaned myself as to go on my knees, positively on my knees, to my husband last night, to beg him to let me buy it, and all for nothing. It is too vexatious," and pretty, foolish, little Mrs. Grey looked almost as though she would like to cry.

Harry was very contrite.

"Indeed," he answered, "I had no idea whatever, Mrs. Grey, that you wanted it so much. I thought you were joking last night, when you and Mr. Sinclair were talking about it. I am so sorry," and he coloured a vivid red. With his usual generosity, he would have liked to have made her a present of it then and there, or else have returned it to the jeweller, and have let her buy it ; instead of which two proceedings, he stood still, looked covered with confusion, twirled the bracelet case nervously in his fingers, and said nothing more.

"Oh! it is of no consequence, Mr. Leonard," responded Mrs. Grey, rather crossly—for she had all her life been a spoilt child—and tried to sweep past him into the shop, but Harry stopped her.

"Look here, Mrs. Grey, I do not care for it one bit. I can buy something else in the shop, and—and return this. Won't you let me? Oh! do."

"Indeed no, Mr. Leonard ; I could not deprive the lady who is to wear this exquisite thing of such a pleasure ; besides which, I should have driven a very hard bargain with Castellani, suitable to my poor purse, whilst you, no doubt, have paid him *en prince;*" and this time Mrs. Grey effected her entrance into the shop, leaving Harry standing with his new possession, very crest-fallen, and rather ashamed of himself for being rich. The thought of Dolly adorned with the bracelet, however, consoled him.

"It will look so well on her pretty arm, much better than on Mrs. Grey, and after all if I choose to buy the bracelet, why should not I?" and with these comforting sentiments, Harry walked away with his treasure, to go home and write to Dolly, and pour out his heart to her.

"I am, of course, awfully vexed to have disappointed Mrs. Grey, who is rather pretty and nice, but as it was only last night she told me she could not afford drawing lessons for her little girl, who has a great deal of talent, how could I possibly guess she would be off this morning to Castellani after the bracelet?" he wrote.

"Of course he could not," laughed Mr. Bruce, when Dolly read him the letter. "Harry will never be a man of the world, Dolly, so make up your mind to that."

"No," she answered softly, "he will never be a man of the world, dear old Harry, but he is something much better, a perfectly single-minded man."

And yet she sighed.

CHAPTER THE THIRTIETH.

LORD MARSLAND.

"DEAR child! I never dreamt of such a thing for her. With his name, his fortune, his many advantages, it never entered my head that he would think of Rose, beautiful as she is."

The speaker was Lady Travers, conversing with her niece Joan. They were sitting in a pretty little back room, in a house in Lowndes Square, all dingy green and crewel-work, and furnished according to the latest canons of high art. For the Travers's had taken a house for the London season, for Rose to be presented, and Joan was spending the day with them.

It was now the end of May, and the roar of the season was daily increasing. Lady Travers had been working very hard, and her face showed traces of it. Morning shopping, afternoons spent in driving from one place of amusement to another, evening dinner parties, concerts, receptions, had done their work, and she was beginning at last, thought Joan, in some degree to look her age.

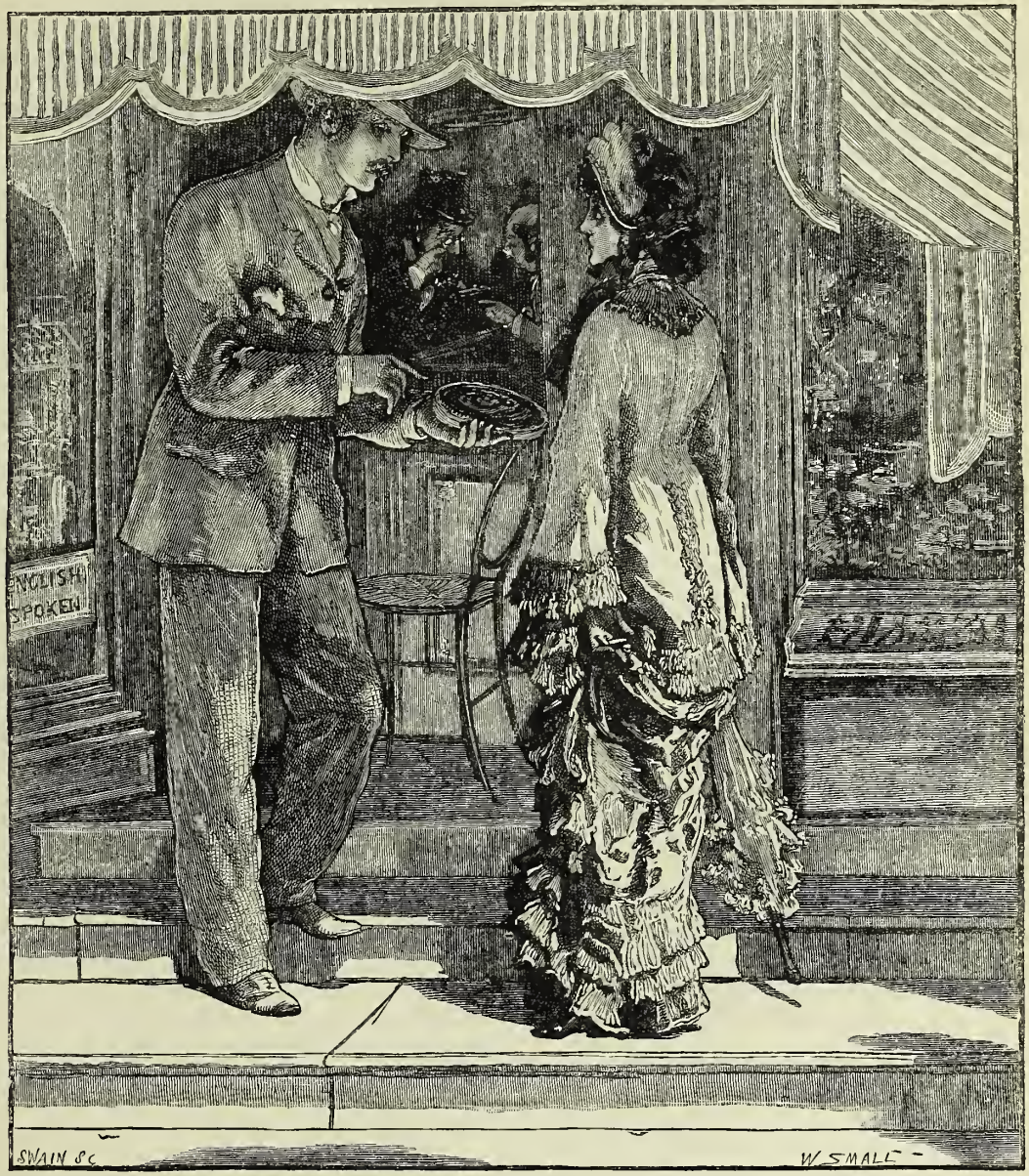
But what a success it had been! "Dear Rose was quite the fashion," her mother was wont to say, and invitations had poured in from all sides, till even Rose's brilliant complexion began to fade, and Lady Travers was so tired that, had it not been for her very strong sense of her "duty," she would gratefully have retired to bed for twenty-four hours. As it was, she was up early, transacting the necessary business of the day, and seldom retired to rest before three in the morning. No wonder Joan thought her looking older.

"You see, my dear," continued her ladyship, "Rose is so simple, so unaffected, that she was really more taken by surprise than I was, and even now she can hardly believe in her own good fortune." Joan frowned impatiently. The marvellous qualities that were from time to time ascribed to Rose, were apt to make her irritable, and she had been waiting for some time to get in a word.

"Pardon me, Louisa, but do you know anything about Lord Marsland?" she asked, even more brusquely than usual, knowing that she was about to utter some unpalatable truths.

"Know anything about Lord Marsland? Naturally, my dear. We are exceedingly intimate with him. I think we have met him every day since we have been in town, to say nothing of his being constantly at our house. What a strange question to ask, dear Joan."

"Not at all," maintained her niece. "You say you know him; I dare say you do in the sort of way you mention, but beyond that, I repeat again, do you know anything *about* him?"



"SEE!" HE CRIED, "THE RESULT OF BEING THE EARLY BIRD" (*p.* 516).

Lady Travers looked up with an air of innocent misunderstanding.

"You puzzle me, my dear, I confess. I really cannot make out what you mean. We—your uncle and myself—know quite enough of Lord Marsland to be aware that Rose is a very fortunate girl."

"Are you so sure of that?" asked Joan, in her bluntest manner. "Do not think me interfering,

Louisa, but have you made any inquiries as to his character?"

"Ah! that is what you mean, is it? No, I do not think you interfering—you are the image of your dear mother"—Joan winced—"and I dare say you allude to the reports—many of them most shamefully untrue—that Lord Marsland is a little fast and wild; but, my dear Joan," and Lady Travers placed her hand impressively on her niece's arm, "show me any young man with his money, and in his position, who is not so; and are they all to be denied good wives on that account? Why, I believe Augustus himself could tell you stories of his youth that you would hardly credit now."

"No," interrupted Joan, "that I certainly should not. I have a very general belief in the follies of mankind, but that Uncle Gus should ever have overstepped, by one hundredth part of an inch, the boundaries of the most rigid propriety, neither he nor you could persuade me."

"You are quite right to believe so implicitly in your uncle's goodness," responded Lady Travers, without betraying by look or word the indignation she felt at heart, "but to return to Lord Marsland, do you not think that the love of a good, gentle, sweet-natured girl like Rose would very quickly, and effectually, wean him from any little faults he may have? I am very fond of him indeed, and I have a right to speak of him as I do, for I flatter myself I know him extremely well, and he has an excellent disposition. Generous, hospitable, manly, he will be the very husband for my gentle Rose, who, with her tact and sweet temper, will very soon influence him in the right way, and they will be as happy as it is possible for two people to be."

These last words Lady Travers uttered in such a manner as to preclude all possibility of their being gainsaid, and Joan took the hint.

"That is all right," she said; "if Rose is happy, what more can you wish? and, such being the case, I am sure I congratulate you most heartily. It seems to me that I have so much to say to you, that I hardly know where to begin, and the news you have told me has quite driven everything else out of my head."

"Tell me about your own affairs then, Joan, and the poor Rushburys—May's death was very sad."

"Dear little May!" said Joan, with unwonted tenderness. "I am so very, very glad her father sent for me. The poor child was so delighted to have me with her, and I really think I was of use to Lady Rushbury, who, between ourselves, has no more idea of managing children than I have of music."

Lady Travers smiled. "And now," she said, "what are you going to do next?"

"I am on my way to stay with Mary Thorold that was—Mrs. Hargreaves now—you remember her, don't you?—and get rid of my superfluous energy by work, real hard work, in her husband's parish. I am to live with them for three months, in order to make a trial of it, and then if I like it, and the experiment succeeds to our mutual satisfaction, I shall give up the Lodge—let it, I mean—and take up my abode at Orminster."

Lady Travers threw down her work in amazement.

"My dear Joan, what are you thinking of? Give up the Lodge! leave Wrangham! what will the—what will your friends say? And how will you exist without horses, dogs, pigs, and cows?"

"Orminster, although a manufacturing place, is in the country, and I dare sayI shall collect some kind of live stock about me. You see the whole affair is but shadowy at present, but, as far as they go, such are my intentions."

"Forgive me, my dear, but you always were, and I suppose always will be, eccentric, and if Augustus and I and all the children went down on our knees before you, we should not move you from your purpose. But I had hoped such a different future for you, and I confess I am disappointed."

"Most of us are disappointed," answered Joan, somewhat bitterly. "Life, I think, is mainly made up of disappointments, but I am not going to be melancholy. I love hard work, and I shall get plenty of it at Orminster."

"And what will Wrangham do without you?"

"I shall hope that my mantle may devolve upon Dolly. The Grahams are devoted to her, so are the poor people. Oh! I have no doubt Wrangham will get on extremely well without me. And as I am on the subject of Dolly, how is she, and where is she now?"

"She comes home to-day, but up to this time she has been with the Bruces, who, I feel certain, have exaggerated her illness; but as they wanted to have her, and she wished to stay on, I made no objection. She is coming to town now, for some drawing-lessons, she says, but I cannot help suspecting that she, too, would like a peep at the season gaieties, and it is but natural."

"Very natural, indeed. I am only so glad that she is well enough to think of such a thing. And Mr. Ingram, what news of him?"

"I had a long letter from Geoffrey only two days ago. He seems most flourishing, and intends to do Italy most thoroughly, spending part of the summer there in *villegiatura* with friends at Frascati, from whence he will make innumerable excursions. He tells me all the world is at Rome, and that they are making wonderful discoveries among the excavations."

"And I suppose he is very happy?"

"Oh! very, I think. Rome suits him exactly."

"What a strange world it is!" ejaculated Joan irrelevantly. "I took an idea into my head, not so very long ago, which it seems was wrong."

"I think I guess your idea. You were perfectly wrong. And now, dear Joan, I hear the luncheon-bell, and I shall have the pleasure of introducing you to my son that is to be. I trust that he and Rose will be punctual;" and Lady Travers folded up her work as calmly and deliberately as though her heart had not been beating with elation and triumph at the thought that Rose was really engaged to be married to Lord Marsland.

Perhaps no one was more surprised at this termination of his bachelor career than was Lord Marsland himself. He liked Rose, admired her exceedingly, and thought her very good fun, as he expressed it, and Lady Travers he always found uniformly charming. He had fallen into the habit of dropping in constantly to Lowndes Square, to luncheon or five o'clock tea, of taking the Travers's about on his drag, of riding with them, and undoubtedly paying them much attention; but when, the night before last, he had lounged up Lady Wells' staircase in Park Lane, he had not the faintest idea that he should leave the house engaged to be married.

But somehow or other so it came to pass. Rose looked brilliantly handsome, Lady Travers was discretion itself, and was so engrossed with her friends that she had only time to give Lord Marsland a friendly nod. It was one of *the* affairs of the season; talked of beforehand, and even for a whole day afterwards. Everything was perfect. No wonder that couples lingered long in the charming little boudoirs and retreats arranged expressly for them; and when, at the end of a prolonged *tête-à-tête* with Rose, Lord Marsland emerged from one of these little bowers of flowers, ferns, and fountains, engaged to be married to his companion, he hardly knew himself how it had come about. Once in the hands of such a strategist as Lady Travers, there was no withdrawing, and when two days had elapsed, and he had been congratulated on all sides by his friends, and even more by his relations, he accepted his fate with resignation, and persuaded himself that he was violently in love with Rose. It had, however, been a blow to him to discover that he had made a mistake or been misinformed as to her money. Some one had told him, on good authority, that the eldest Miss Travers would have a good independent fortune, and behold! to his dismay, he discovers that Rose is not the eldest Miss Travers. All this, and much more, he has gone through, but Lady Travers' cold blue eye has effectually over-awed him, and, early as it is yet, the wedding-day is already talked of.

Rose has so much risen in her own estimation that she has only two fingers to give to Joan, and a languid smile of thanks for her congratulations; and the lunch would have been constrained had it not been for Lady Travers' admirable tact. She took just sufficient notice of her future son-in-law to please him, and not enough to bore him. When he excused himself from eating, on the plea that he had breakfasted only an hour ago, she made no comment, although she saw Rose frown. Mental notes were all she allowed herself, and they were already reaching a high figure with respect to Lord Marsland, and all the changes and reformations that were to take place when he was Rose's husband. But she said nothing, and Joan, sitting opposite the handsome, weak-looking young man, with the *blasé* face, and dull eyes, that looked as though they had not known sleep for nights, wondered what Louisa really thought of him.

Sir Augustus and two friends, dropping in, were hailed by her with delight, for she expected every minute to see Lord Marsland fall asleep in his chair, so tired and bored did he seem. Her uncle was very bland, and rather more pompous than usual, owing to the honour that had lately befallen his house. His niece had never known him so amiable to her, and they chatted away quite in a friendly style, till luncheon was ended.

Lady Travers having innumerable engagements, Joan would then have taken her leave, but that she waited to see Dolly, who was expected at four o'clock. No one made a stranger of her. Lady Travers retired to her sofa for a short and most necessary siesta, Sir Augustus to his sitting-room, whilst Rose remained with Lord Marsland. Joan took up the *Times*, and finding an account from "Our Italian Correspondent" of the excavations at Rome, read it with much interest, till she heard the clang of the front door, and a light step on the staircase. The door opened, and Dolly looked in.

"Where are you all?" she cried. "Why, Joan, you here? Oh! I am so glad;" and with the sound of the low, deep voice, and the sight of the wistful brown eyes, Joan's undefined enmity to her cousin received its *coup de grâce*.

"So you are come home at last, Dolly?" she said, cordially and affectionately; and as she kissed the thin white face, she thought to herself that, as far as appearances went, Mr. and Mrs. Bruce had certainly not exaggerated their child's illness.

CHAPTER THE THIRTY-FIRST.

HOLME REGIS AGAIN.

THE visit to the Bruces had been full of pleasure and full of pain for Dolly. Pleasant it was to be petted, and spoiled, and made much of, to have her comings and goings noted, to know that she was of importance, in fact to feel at home. Pleasant to visit all the old haunts, to see her old friends, to read the old books, to sit in the dear cosy little drawing-room, to walk with Uncle Tom, and recommence her old botanical and geological studies; but pain, an ever-present pain, to have a secret from those who had been both father and mother to her.

To them Geoffrey and her struggles must not be mentioned. How often, when talking of Ferdie, of her life at Wrangham to Mr. Bruce, and listening to his words of counsel and advice, did she long to tell him all, to confide to him that she had been untrue to Harry, certainly only in thought, and that she owed him a life-long devotion in consequence! But she could not. She had cast the die for herself, and now it was over. It was a subject, she felt, which must lie only between herself and her conscience. Once let the glare of daylight in on it, and it would be difficult not to lay the onus of her happiness or unhappiness on some one else's shoulders. She had fought, and prayed, and struggled, and she hoped she had done right. For her own part she had never doubted as to what was her true course, and any thought of giving up Harry had been against her better nature.

And here, at the Vicarage, they were always talking

of him, although they would not write about him. Uncle Tom held that Dolly was right not to give him up in compliance with her father's wishes, but wrong to think even of marrying till she had obtained that father's consent; and Dolly had to turn her weapons against herself, as she had been doing for the last three months, and fight dear Uncle Tom now, in addition to Sir Augustus.

Everything reminded her of Harry. There was the stream where they had played together, up to the last hour almost before she left Holme Regis; there was the cedar-tree, under which they had exchanged vows of constancy, and on the bark of which Harry had inscribed her name in every variety of letter; there, on the other side of the stream, she could just catch sight of the mullioned windows and red brick of his home across the park, where they had so often wandered in search of mushrooms and blackberries.

Go where she would, to church, to the cottages, to the school, Harry was present with her everywhere,



"DOLLY MUST HAVE A GLASS OF COWSLIP WINE, AND A CHAT WITH HER OLD FRIEND" (*p.* 522).

filling her with a yearning tenderness for one who had always been such a good "brother" to her, to be succeeded by remorse that she had not repaid that tenderness better.

But both pleasure and pain were soon to be merged in physical prostration. Mr. and Mrs. Bruce had been shocked more than they would say, to see the change which little more than two years had wrought in their darling.

She had left them a laughing, bright-eyed girl, full

of fun and mischief, happy with a happiness which looked with a friendly eye upon the whole world, having hitherto met with nothing but love and kindness at its hands—open, unreserved and fearless—and she came back to them taller, slimmer, more graceful, the brightness gone from her eye, the colour from her cheek, with an indescribably pathetic look hovering round her lips, and a yearning wistfulness in her eyes, that puzzled Uncle Tom, and grieved Aunt Mary. The latter put it down to Ferdie's death, the former to the wearing uncertain engagement with Harry, and both tried to see what spoiling would do towards restoring their old Dolly.

And, in fitful gleams and bursts, her old merriment would come back, and she would tease Uncle Tom as in former days; but it was only transient, and, as she herself said, there was very little, just now, of the kitten left in her. It was almost a relief to Mrs. Bruce when she broke down completely, about a month after she had been there, so that the change might be ascribed to purely physical causes.

And she was very ill. A tiresome low fever laid her quite prostrate, taking all the more hold of her that she was in neither a mental nor physical state to stand up against it. Mrs. Bruce was in her glory. She was a born nurse, and Dolly felt thankful to be in these kind hands, instead of at Wrangham, where she would probably have been handed over to the well-meaning but stolid attentions of Gretchen. And at the end of twenty-one days, during which she was watched and tended with unremitting love and care, the fever took a favourable turn, and she came back to the world and its troubles.

But the troubles were all softened and subdued through illness. All acuteness was gone from them, leaving a tender, soft memory of Ferdie, a dull aching over Geoffrey, a gentle, almost, as it were, maternal love for Harry, but all three feelings blurred and misty from weakness.

And as with the spring-time and the primroses she grew stronger, she resolutely thrust Geoffrey away from her, never suffering herself to think of him, and many a time Mrs. Bruce would look up in surprise at the abrupt request, "Let us talk, dear Aunt Mary. Tell me something—something interesting," proffered in the hope of escaping from her own thoughts.

But here, at Holme Regis, it was almost as difficult to escape from reminders of Geoffrey as of Harry. If the latter had come as an infant to Holme Regis, Geoffrey had been born there; if Harry owned the place now, Geoffrey had once been its heir. The great black yew-trees which she could see from her window had been planted by Geoffrey's great-great-great-grandfather—it is astonishing how accurate we are about the affairs of those we love—in imitation of those at Hampton Court; the famous grove of walnut-trees, where she and Harry had spent so many hours when they were children, was planted by one Mr. Ingram on the day his son and heir, Geoffrey's grandfather, had been born. The pictures, the bronzes, the statues in the house were no Leonard collection, but the result of years spent in Italy by one Roger Ingram, who had brought back to Holme Regis an Italian wife to pine and die in the damp English climate.

All this, and a great deal more, Dolly knew about Holme Regis. The dispossessed Ingrams had always had, as we know, a great fascination for her, and many a time had Harry been obliged to pull her away from the portrait of one of Geoffrey's ancestors, asking her how she could possibly care to look at anything so ugly. Well she remembered now, how as a little thing, beginning to understand the mysteries of English History, she had wept a few quiet tears in her bedroom, on being informed that the Ingram of the time of Charles I. had been a Roundhead. Her interest in them had never been quite the same after that, and the armour in the hall, of that period, was a real grief to her.

So when Mr. Bruce one morning offered to take her for a short drive up to the house, where he wanted to speak to the housekeeper, Dolly did all she could to evade it; but dear Uncle Tom was very obtuse, and would not see that she did not wish to go, and finally drove her off triumphantly in the pony-carriage, round by the furthest lodge, in order to extend the pleasure.

In this way they passed through the whole village, which showed everywhere signs of a new life breathed into it by Harry and his money. Masonry and scaffolding were the order of the day, and Mrs. Bruce had been almost beside her quiet self with joy to see the wish of her Holme Regis life, a Cottage Hospital, in process of erection.

"The idea of telling me that Harry's character will not bear the closest inspection," thinks Dolly to herself. "Dear old Harry! how good he is!"

"The best fellow in the world," says Uncle Tom, as though in answer to her thoughts. "You are a lucky girl, Dolly, to win the love of a good man like that, although, I must confess, I think the preponderance of luck is on his side."

"Uncle Tom, I wish you would find out the origin of that information that was given papa about Harry."

"I have written to my friend Corbett at Christchurch—you remember him, Dolly, don't you?—on the subject, but I have not yet received his answer. I am sure your father has been misinformed. I do not believe a word of it."

"Nor I; not one syllable."

"Positive as ever, Dolly?"

"No, not quite so positive as I used to be; there is so little one can be sure of; least of all of oneself."

"Dolly," and Uncle Tom turned round and looked at her searchingly, "if you were not an invalid, I should preach you a sermon, not so much on your words, as on the tone of them. I shall soon have to administer to you a moral tonic."

"Ah! *do* preach me a sermon, Uncle Tom. I want your sermons badly—oh! so badly. You do not know how I have pined for them at Wrangham."

"My poor child! My poor little Dolly! But all the same I shall not give you one this morning. If you only look round you," and Mr. Bruce pointed with his whip to the tall fir-trees, standing out straight and dark against the clear blue sky, to the fields golden

with buttercups and crowsfoot, to the clear rippling stream, to the whole landscape of tender, spring-like beauty, "you will see a sermon in every hedge-row."

"Yes," said Dolly softly, "dear Uncle Tom, you always understand one."

"I am not so sure of that, my child. I begin to think you have a little bit out-grown my comprehension."

Dolly coloured, and her eyes filled with tears, reading, or fancying she read, reproach in Mr. Bruce's words, but she answered nothing. There was nothing to say. It was true; she had for a time got beyond his comprehension.

They drove on for some minutes in silence, till they came to the first lodge.

"What do you say, Dolly, to the old wyverns being removed?" asked Mr. Bruce, pointing to those mythological animals standing in stony ugliness on the gateway. "Harry thinks it is absurd of him to keep up the old Ingram arms, and wants to take them down, but I told him he must consult you first."

"Then I say no," answered Dolly decidedly, involuntarily thinking of Geoffrey, and not of Harry—Geoffrey who was so anxious that the old place should not be altered. "I shall write and tell Harry so."

"This present Ingram," continued Mr. Bruce, whom you and Harry have both curiously enough run against, seems an improvement on his father, but I am afraid they are a bad lot, and there is very little doubt that Holme Regis has made a change for the better in falling into the Leonard hands, though I never can help regretting the decadence of an old family."

"The present Mr. Ingram is not in the least like his father, I should think. He is a—a—most perfect gentleman."

"No doubt, no doubt. The Ingrams have been that for generations, but nevertheless it did not prevent this man's father from gambling away his estate, and very nearly breaking his wife's heart. But, of course, this Geoffrey Ingram is a very different man, or Harry would not be so enthusiastic about him; and you liked him too, very much, did not you?"

"Every one likes him. You do not know how good he was to Ferdie."

"Yes? His mother, so I have heard, was a woman in a thousand, and I believe he was very devoted to her."

"Oh, yes! very."

It was only in little short broken sentences like this that Dolly could trust herself to speak of Geoffrey, or she would have burst into a flaming panegyric of the man whom Uncle Tom so quietly condemned as one of a bad lot, and have betrayed her secret.

But Mr. Bruce, intent on his pony, and on the different messages he was charged with by his wife for the housekeeper at the Squire's house, noted neither her varying colour nor her tone of voice, and placidly continued his route till they came to the further lodge, where they turned in.

Dolly suddenly felt a new interest in these beautiful domains, as they drove down the centre avenue of elm-trees, of the three that led direct up to the house, and, looking about with the eye of a future mistress, discovered that it was high time the master should should return home. Green weeds were showing their obtrusive heads in the drive, the lawn had lost its velvety look, moss was beginning to collect on the stone-work, the ivy hung in unpruned luxuriance; all of which, combined with the closed shutters, and uninhabited look of the house, gave it a very different appearance to what it had worn in the time of its former severe master, Mr. Leonard.

Mrs. Thomas, the old housekeeper, was delighted to see Mr. Bruce, but she stared at Dolly as if she had been a stranger, even after Uncle Tom had said—

"I have brought a visitor to see you, Mrs. Thomas, a very old friend."

"'Tis never Miss Dolly," she exclaimed at length, "oh! but she do look poorly;" and nothing would do but that Dolly must have a glass of cowslip wine, and a chat with her old friend, who in former years was always either petting or scolding her.

"To think that you did not know me, you dear old Thomas!" laughed Dolly, as she followed her to the deliciously comfortable room, with the deep window-sills, blazing fire—even on this warm spring day—and old oak presses, where Mrs. Thomas reigned as a queen over her vassals and subjects.

How often, in years gone by, had Harry and Dolly invaded those sacred precincts for the most luxurious of meals, when they were regaled with hot cakes of Mrs. Thomas's own making, and tea yellow with the richest cream, and Dolly would be sent home with a large basket of the afore-mentioned cakes, as a present to Mrs. Bruce. Sometimes, too, that room had assumed a severely judicial aspect, when Harry and Dolly, dripping from head to foot from their aquatic amusements, or bedaubed with mud, would be brought in there to be rebuked by Mrs. Thomas, and condemned to bread and water in lieu of tea and cake. But now Mrs. Thomas bustled about, bringing out all her richest stores for Dolly, who declared that she was certain she wanted to make her ill, and keep her there.

"Yes, that I should like to, my dear," responded the old woman; "keep you here for Mr. Harry. I always say you ought to be mistress here. But who knows but what it may come to pass yet, now Mr. Harry is his own master, and wants a wife, and who should he think of but you, when he loves the very ground you tread on?"

Mr. Bruce laughed. "He must make haste home, then, must not he, Mrs. Thomas?"

"Indeed he must, sir, for I am almost tired of looking after the servants, who are not what they were, and don't know how to look after a gentleman's place like this, unless you go on at them from morning till night. And Mr. Harry, he keeps on sending home cases and cases full of I don't know what, not to be opened till he comes home. I can't think what he wants of them, the house is a sight too full already."

"Oh! let me see the cases," exclaimed Dolly, with unusual vivacity, for she was essentially a woman, and

a packing-case from a foreign country appealed powerfully to her imagination.

"Lor', my dear, they are nothing to see, great ugly wooden boxes, lumbering up the passages;" but Dolly was resolute, and, insisting on Mr. Bruce coming with her, went to have a look at the cases, longing to see their contents. They were, as Mrs. Thomas had said, great ugly wooden boxes; but there were mysterious labels on them, bearing inscriptions, which Dolly deciphered as "Venezia," "Firenze," and finally "Roma."

"Poor dear Harry!" said Mr. Bruce, "I hope he has not been very extensively taken in, and that these cases do not contain nothing but trash, for he is hardly a connoisseur in pictures, statues, and objects of vertu—eh, Dolly?"

"Hardly," said Dolly with a smile, which faded before a sudden memory, "but I dare say Mr. ——, a friend, may have given him the benefit of his judgment."

"And now, dear child, we must be off, so take your last look at those fascinating cases, and come away."

Dolly obeyed, bid Mrs. Thomas a hearty but rapid adieu, promising to come and see her once more before she left, and flying up-stairs two steps at a time, and down sundry passages and corridors, found herself in the great square hall, with portraits of Ingrams all around her.

In coats of mail, in high ruffs, with close-cropped heads or flowing wigs, with ringlets on their foreheads, with powdered hair, in every variety of fashion, these Ingrams of bygone ages looked down on Dolly, breathless and dizzy from her rapid run. Weak as she felt, as she sat down, she had strength enough to note the strong family likeness that ran through them all, and which was repeated in Geoffrey, in the finely-curved nose, the short upper lip, the deep-set eye, and firmly-moulded jaw and chin that marked him at once as an Ingram. She was still gazing intently at all these Geoffreys, and Rogers, and Barbaras—the prevailing female name in the family—when Mr. Bruce appeared, looking very severe, and prepared to scold her for her imprudence in thinking herself well, and racing up-stairs as she had done. Dolly disarmed him at once, by confessing her folly; and, lifting her carefully into the pony-carriage, Uncle Tom drove her home, to be lectured by his wife. But the latter met them with only a mild remonstrance on their having been out so long.

"You are very late, Tom; you forget that our child is an invalid;" then, turning to Dolly herself, "Here is a letter for you, dear."

The letter was from Rose, announcing her engagement to Lord Marsland. As Dolly read and re-read it Geoffrey's words with respect to her future brother-in-law came flashing across her memory, easily to be understood now, by the new light shed on them.

The letter was not satisfactory, at least Dolly did not think so, as she perused the few hurried lines scrawled off by Rose to announce the event:—

"Lowndes Square,
"Tuesday.

"DEAR DOLLY,—I wonder if you will be very much surprised to hear that I am engaged to be married to Lord Marsland. It was all settled last night at Lady Weils', in Park Lane. I have no time for details, which will keep very well till we meet. Mother is in ecstacies, but does not like anybody to think so, and I suppose I am very pleased. I shall have lots of fun when I am married, and you must come and stay with me at Wayvern, which is a lovely place. I cannot write more, as I am going out with his lordship, who drives a four-in-hand. *Entre nous*, I am rather nervous. We shall be very glad to see you here on Thursday.

"Your loving
"ROSE."

So Rose was going to be married to Lord Marsland. Dolly wondered why the news made her feel so depressed. She should miss her sister very much, for, in her own way, Rose was very fond of her, and they had always been excellent friends, but that was not sufficient to account for that miserable feeling of depression that had suddenly fallen on her. Perhaps it was the letter itself. Was it that of a girl in the first happiness of an engagement to the man she cared for? or was it not rather that of one who had set her heart on a certain object, and having accomplished it, was inclined to see it in its right light? Dolly did not know. Geoffrey's words, "But, Dolly, above all, do not make a mistake. Look around you, and see the many wretched homes there are, the result of cultivated, refined women being mated with their inferiors," would rise to her mind. Was not Rose going to do this thing?

How well Dolly remembered the short time she had spent in Lord Marsland's company, and the intense dislike she had taken to him, to his manners, and, above all, to his conversation! Surely, surely, he was Rose's inferior, in every single respect, and yet she was about to marry him.

No wonder Uncle Tom asked her if she had had bad news; and she was obliged to confess that, on the contrary, she had heard that her sister was engaged to be married, and was apparently making a brilliant match. Throughout the afternoon the subject was discussed, and Mr. Bruce warily suggested that perhaps now Sir Augustus would allow Dolly's wedding to come off; and, in this way, the conversation came round as usual to Harry.

Dolly had to take herself to task very severely for her conduct this morning, in allowing herself that look at the Ingram portraits, only reminding her of Geoffrey, and by no means conducing to make her happier; and when she sat down to answer Rose's letter, she felt more inclined to cry than to do anything else.

"All weakness," as Mrs. Bruce said to her husband, when he remarked on Dolly's low spirits, "and this engagement of her sister's, too, cannot but make her feel very forcibly her father's injustice with regard to Harry."

And so it was. Dolly could not but feel that she was, in a certain degree, an alien in her own home, not exactly unwelcome, but yet uncared for, and nevertheless, for some mysterious reason, not allowed to make a home for herself. It was hard, and no doubt had a large share in the depression that she tried in vain to shake off, but which, being in a great measure,

as Mrs. Bruce had said, the result of physical weakness, was not so easily to be got rid of.

She was quite glad she was going home in two days' time—sorry as she was to leave the Vicarage—to see Rose, and to hear from her own lips that she could not possibly be happy without Lord Marsland, also to make real acquaintance with her future brother-in-law, and try if she could not find out in him many hitherto undiscovered virtues. One thing she resolved—she would not go near the Court again before she left. She would never cross its threshold till she entered it as Harry's wife, prepared to devote herself to him for the rest of her days; and suddenly, thinking of the beautiful old place, came the thought, What if she were doing what she blamed Rose for—determining to marry a man to whom she could not give her whole heart, who was rich, and who would spend his money lavishly on her?

"But she did love him," she cried softly to herself, "she did love him dearly, never remembered the time that she had not loved him, and if he had been poor would even more willingly have married him; and yet was she doing right?"

Oh! this constant worrying, when would it cease? Her head was splitting, yet it never left off. Over and over again, round and round, till she fled to the drawing-room, to find that Mrs. Bruce had been just coming to fetch her. Like a tired child she sat down on the hearth-rug, and leant her head against Aunt Mary's knee.

"My darling," said her old friend as she kissed her, "it makes me so happy to think that some day—not so very far off, I trust—we shall have you at Holme Regis. Then Uncle Tom and I will be perfectly happy with our two dear children near us."

It seemed like a solution of all her worries, and five minutes afterwards she was fast asleep, and dreaming of Ferdie, with the firelight playing on her white face, and a smile hovering round her lips. So Mr. Bruce found her when he came in, and taking advantage of her unconsciousness, indulged in what was an astonishing thing for him to do with respect to his neighbours, a tirade against Sir Augustus.

"I am determined to sift that matter about Harry's doings to the bottom," he said, "but it looks to me merely a pretext for not allowing the marriage; for, from what Dolly says, I do not fancy this Lord Marsland is a very exemplary character."

"Poor little Dolly!" answered his wife. "Sometimes I begin to fear, Tom, that she and Harry will never come together. Why, they have been engaged to be married three years next September, and are no nearer being married than they were then."

"It will come all right, do not fear. A little waiting and a little patience will not hurt either of them."

"I am not so sure of that," pointing to Dolly. "It seems to me that it has already hurt our child considerably. Oh! I do trust they will take care of her in Lowndes Square."

"I cannot understand it all," rejoined Mr. Bruce musingly. "If Harry were a poor man, one could see the motive, but as it is there is no obstacle——"

"But a narrow-minded, cold-hearted—— Why, Dolly, are you awake?"

"Only this minute. I have not heard a word you have been saying. I have been dreaming."

"Something pleasant, I hope?"

"Of Ferdie. I always dream of him now."

"I wish I had seen your boy, Dolly."

"Oh! so do I. I know you would have loved him. He was so clever, my darling little Ferdie."

So it was. She always dreamt of her boy and Geoffrey, and to-day in her dreams Ferdie had put her hand into Mr. Ingram's, and she had not withdrawn it. And, warm as was the room, the awaking made her shiver.

"What shall we do, my dear?" asked Mr. Bruce of his wife, when they were once more alone, "to banish that sad look from Dolly's eyes? It quite haunts me."

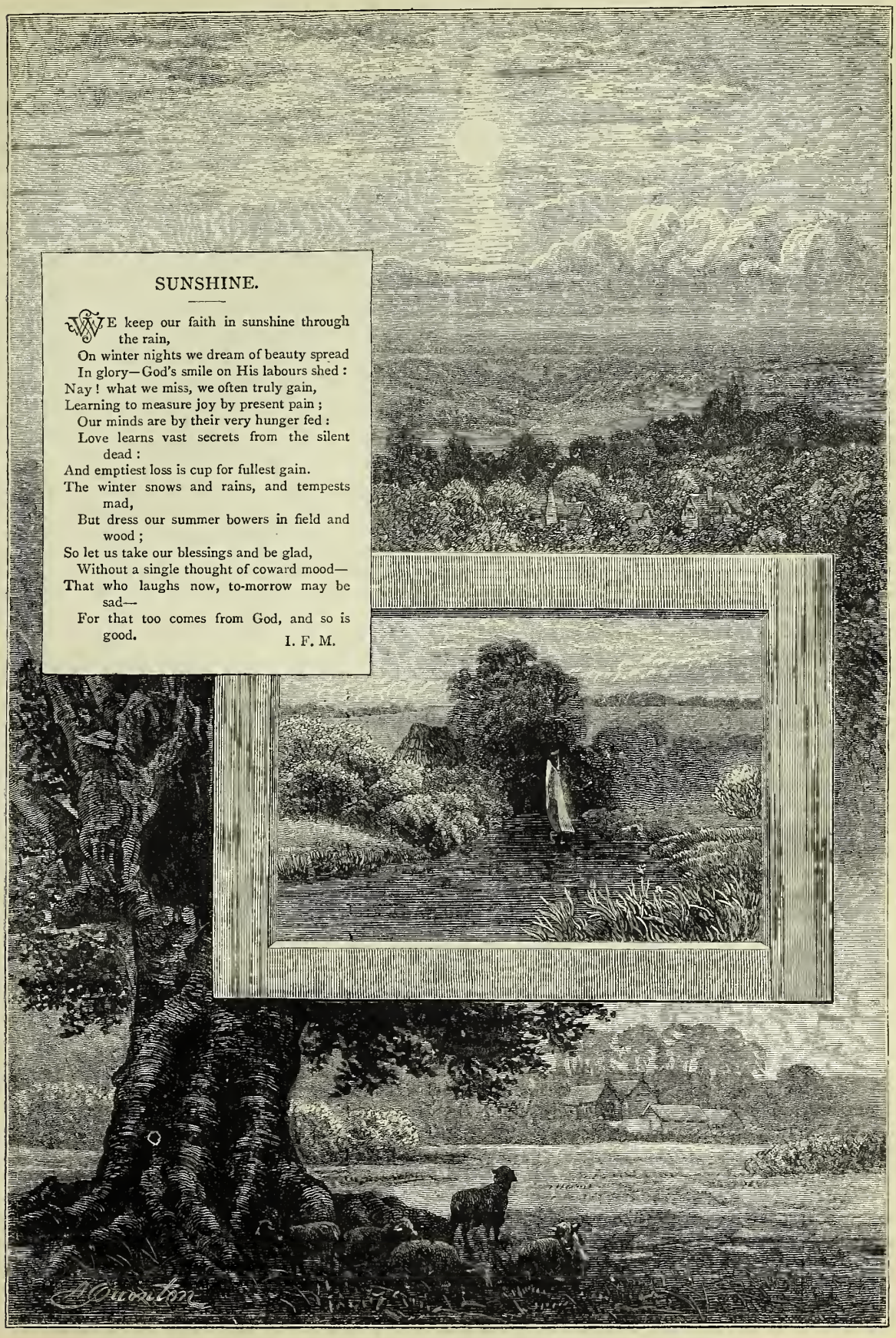
"I know a very simple remedy. Marry her to Harry. Till then, she will fret for him, and fret for Ferdie, and it will take her months to recover her strength."

"Oh! nonsense, my dear," responded Mr. Bruce, who flattered himself he was not sentimental, "I do not despair of her strength. It is her old brightness I want."

"You will not see that, then, until she is Mrs. Leonard."

END OF CHAPTER THE THIRTY-FIRST.





SUNSHINE.

WE keep our faith in sunshine through the rain,
On winter nights we dream of beauty spread
In glory—God's smile on His labours shed:
Nay! what we miss, we often truly gain,
Learning to measure joy by present pain;
Our minds are by their very hunger fed:
Love learns vast secrets from the silent dead:
And emptiest loss is cup for fullest gain.
The winter snows and rains, and tempests mad,
But dress our summer bowers in field and wood;
So let us take our blessings and be glad,
Without a single thought of coward mood—
That who laughs now, to-morrow may be sad—
For that too comes from God, and so is good.

I. F. M.

THE POST OFFICE SAVINGS BANK DEPARTMENT.

TWELVE months ago the Savings Bank Department—which at its institution was accommodated in one room at the General Post Office, and afterwards in premises in St. Paul's Churchyard and Little Carter Lane—was removed to the handsome new building in Queen Victoria Street, shown in the accompanying illustration. The removal took place on Bank Holiday, August 2nd, 1880, and although 1,800 separate articles of furniture, 12,000 ledgers and summaries, and sixteen millions of warrants, declarations, and depositors' closed books, besides an enormous mass of official papers, were removed, the arrangements were so complete that not a hitch or accident occurred, not a paper was lost, and on the following morning the staff, consisting of 563 on the major establishment and 139 on the minor establishment, were at work as if no great revolution had taken place in their official world.

At that time important events were happening in the great world of politics; there had been a change in the Ministry and fresh Parliamentary legislation had taken place, and so it came to pass that just when the Department was transferred to the new premises there came also a change in its history. Two new schemes were introduced, one for depositing small amounts by means of penny postage stamps—offering hitherto unheard-of facilities for beginners in thrift—and the other for the purchase and sale of Government Stock—an encouragement to old hands at thrift. The Savings Bank system was thus attacked by innovations at both ends, practically reducing the minimum and increasing the maximum limit of deposits, and the attack came at the only time in its history that the Department was in a position to successfully cope with the enormous increase of work these innovations brought with them, namely, when it entered for the first time a building specially erected as its headquarters.

The anniversary of that event is a good time to think about the innovations thus introduced, and to see whether the results have been sufficient to justify the flourish of trumpets attending their inauguration. Before doing so, however, a few words must be said about the new building in Queen Victoria Street. It is the loftiest and most imposing structure in the whole street, its height being 95 feet above the paving-line, and the length of frontage nearly 148 feet; it has an average depth of about 100 feet, and covers a ground-area of nearly 15,000 superficial feet. The exterior is plain, but striking, and suggests hard matter-of-fact business.

The interior arrangement of the building is admirably adapted to the purposes required. The basement is used principally for the storage of papers, which will generally include an aggregate of about fifteen millions of notices of withdrawal and receipted warrants, besides an immense collection of other papers and documents arranged on 15,000 feet of shelving. On the ground-floor are the rooms of the Controller, Mr. T. G. Ramsay, and the Assistant-Controller; a spacious room devoted to the General Correspondence Section, and another, still larger, to the so-called Deposit Section, where acknowledgments for all deposits made at the 6,233 offices open for the transaction of Post Office Savings Bank business are written by boy copyists. At busy times, such as the early part of the year, as many as 41,000 acknowledgments have been written in one day, the average daily number for the year ended December 31st last being 12,234. On the first floor is the Correspondence Branch, divided into sections for correspondence relating to accounts of deceased depositors and insane depositors; to lost books, friendly and provident societies, and other matters too numerous to particularise. Some idea of the work involved in correspondence may be gathered from the fact that on an average about 13,000 manuscript letters are despatched from the Department yearly, and that nearly 400 printed forms are in use and are sent in lieu of manuscript letters whenever it is possible to do so. Roughly stated, about half a million of these forms are despatched annually. A part of the first floor and the whole of the second floor are appropriated to the Book-keeper's Branch, where the departmental ledgers, numbering 3,927, and containing more than two millions of depositors' current accounts, are kept, and in which every deposit and withdrawal is entered, the interest calculated, and the balance struck at the end of each year. The principal daily duties of the 96 ledger-keepers consist in opening new accounts, posting deposits in accounts already opened, and preparing warrants for the repayment of money; the average issue of such warrants daily during the past year having been 4,787, and the greatest number in any one day 12,952, for the repayment of close upon £50,000.

The third floor is divided into two parts, one being assigned to the male staff of the Examiner's Branch, whose duties consist chiefly in examining warrants for the repayment of money and comparing the entries in depositors' books with those in the respective accounts in the ledgers. As many as 10,827 books have been received for examination in one day. The other part of the third floor is occupied by the minor establishment, employed in sorting duties, which include the folding and despatching of correspondence, the daily number of communications so dealt with having sometimes been about 50,000.

The fourth floor is the *terra incognita* of the rest of the Department, being appropriated exclusively to the staff of female clerks, numbering 140, whose duties consist in the examination of warrants and postmasters' accounts, the compilation of the totals of

daily and quarterly transactions, and an important portion of the Stock Investment business. A separate staircase from the Knightrider Street entrance leads to this floor, which is entirely separated from the rest of the establishment.

The total cost of the new building was £45,000, and £70,000 for the site; the architect was Mr. James Williams, of H.M. Board of Works, and the contractor, Mr. William Brass.

The removal took place, as we have said, on the 2nd August, and on the 13th of the following month Mr. Fawcett's scheme for depositing small amounts by means of penny postage stamps came into force as regards ten selected counties—five in England, one in Wales, two in Scotland, and two in Ireland. Simplicity is the soul of all great things, and nothing could be simpler than this new scheme. For years past efforts had been made by thrift-mongers to reduce the minimum of deposits fixed by the Savings Bank Act of 1861, but those who knew most about the subject saw that such a step would be unwise and inexpedient. Mr. Fawcett's simple plan cut the Gordian knot by giving to the advocates of thrift what they wanted, and at the same time retaining the integrity of the Act.

It is late in the day to describe the scheme, but as it cannot be too well or too widely known, a word or two here will be pardoned. Apply at any post office in the United Kingdom for a stamp deposit slip, and a document four times the size of the representation above will be given :—

On the back of the form will be found these words, which give the gist of the whole thing in the crispest language :—

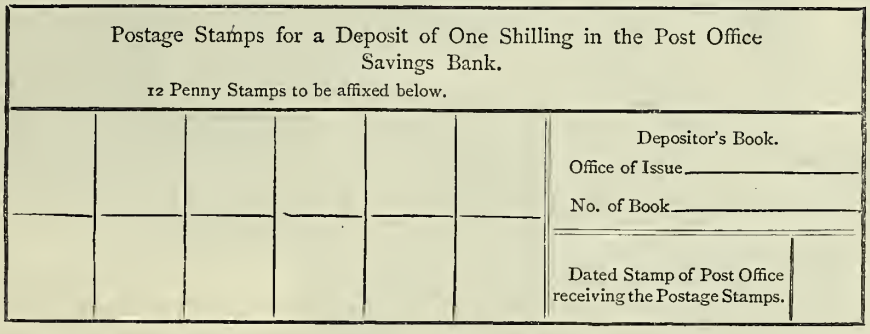
"NOTICE.—Any person desirous of saving One Shilling, by means of penny contributions, for deposit in the Post Office Savings Bank, may do so by purchasing with every penny so saved a penny Postage Stamp and affixing it to this form. When 12 such stamps have been so affixed, the form may then be taken to any Post Office Savings Bank in the UNITED KINGDOM, where it will be received by the Postmaster, and One Shilling be allowed for the Stamps, which Shilling will be accepted either as the first deposit in a new account then to be opened, or as an ordinary deposit if the owner of it has already opened an account. If the Stamps affixed to this form are defaced or in any way damaged, they will not be received by a Postmaster."

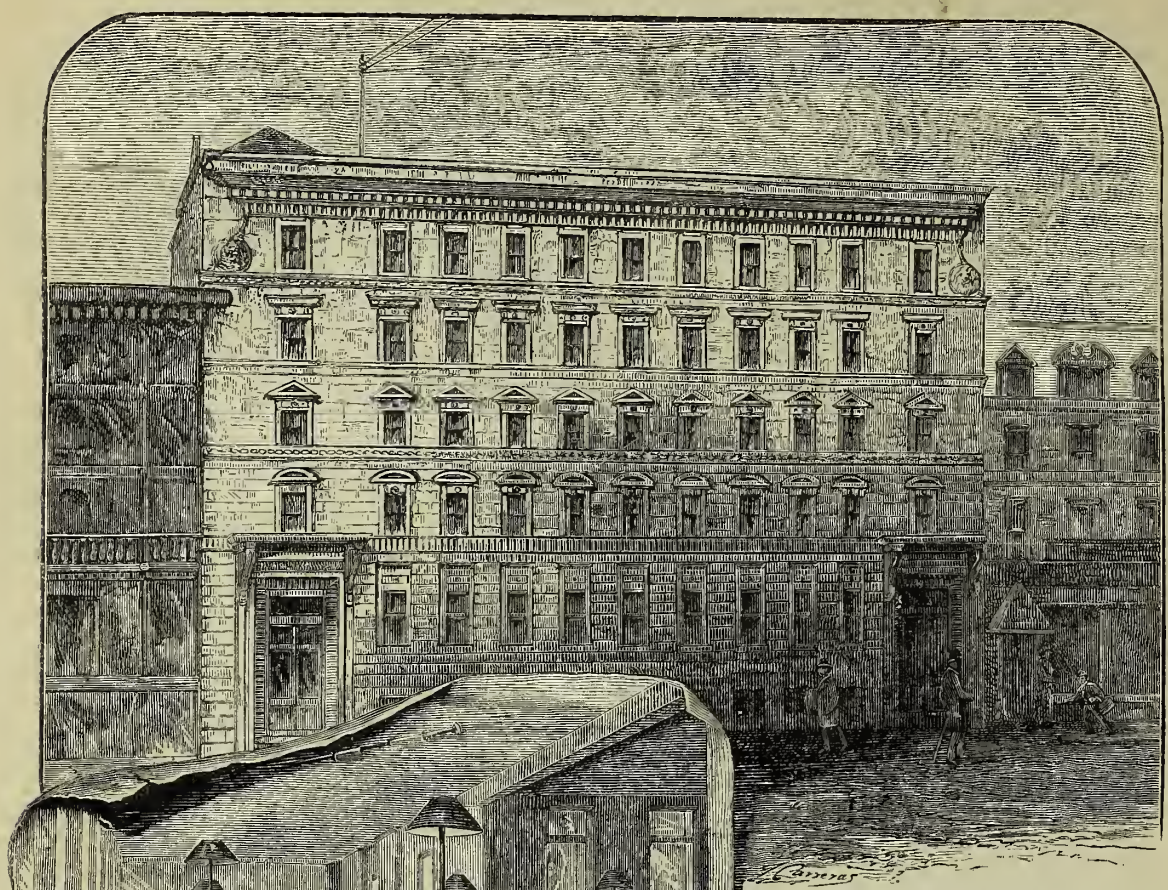
The verdict of the ten counties in which the scheme was tried was unanimous. Cardiganshire led the pæan with a well-pitched note, while Ireland only put in a few tones in a minor key. The trial resulted in the deposit of 14,000 forms, each duly filled up with a dozen stamps, and in the opening of 7,000 new accounts by this means, in the course of seven weeks.

As soon as the verdict of the trial was known, Mr. Fawcett, with that promptitude which is his characteristic, said in effect : "The thing is a success, let it be successful—try it everywhere." And the result of that "Open Sesame !" given to the pockets of tens of thousands of our struggling poor has been as follows :—The total number of deposits by means of postage stamps to the middle of March last was 404,036, and the total number of stamps received 6,215,280, while the total number of new accounts opened to about the end of January last was estimated at 131,500.

Those are cold, hard, and dry figures ; but, being interpreted, they mean that in thousands of homes there has been a Voice heard crying in the wilderness of extravagance and recklessness, that a duty is laid on every living man, and that duty is Thrift.

As everybody likes to aid that which is successful, here are a few practical hints as to how it may be done. Let every large employer of labour on some great occasion, say the coming of age of his eldest son, forego a few items in the display of fireworks, and present every employé with one of these Savings Bank forms and one stamp attached—the nucleus of a capital ; let Sunday-school teachers, when they give their next annual treat to the scholars, withhold one indigestible bun, and give instead a postage stamp affixed to the proper form ; let clergymen, district visitors, and City missionaries distribute these forms as freely as they do periodical literature, and it may be they will be doing as great a good. For this postage savings scheme has taught many lessons ; it has shown that if self-help is made possible, and as easy as possible, poor people will help themselves ; its success shows up the failure of all efforts to make thrift compulsory ; it proves that one virtue always allies itself to another, for all the six millions of stamps received have been clean and have been placed neatly on the forms ; it demonstrates, too, how groundless are the fears engendered by the cry of "Wolf ! wolf !" when there is no wolf, for moralists prophesied that every stamp within reach of an office-boy would be a temptation to him to steal it, whereas only one case has been challenged, and that case fell to the ground.





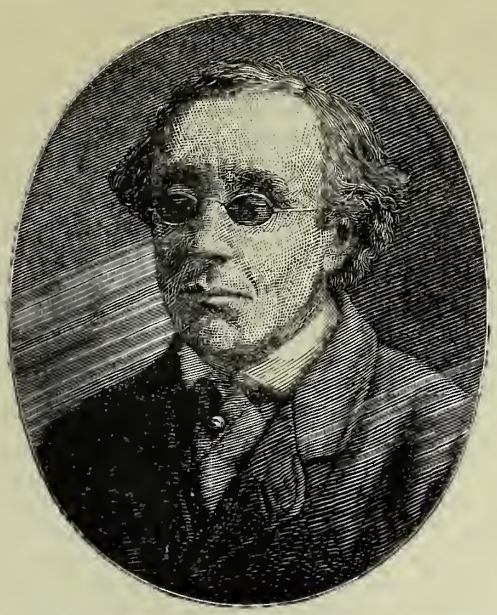
SAVINGS BANK DEPARTMENT, QUEEN VICTORIA STREET, E.C.



CORRESPONDENCE BRANCH OF SAVINGS BANK DEPARTMENT.

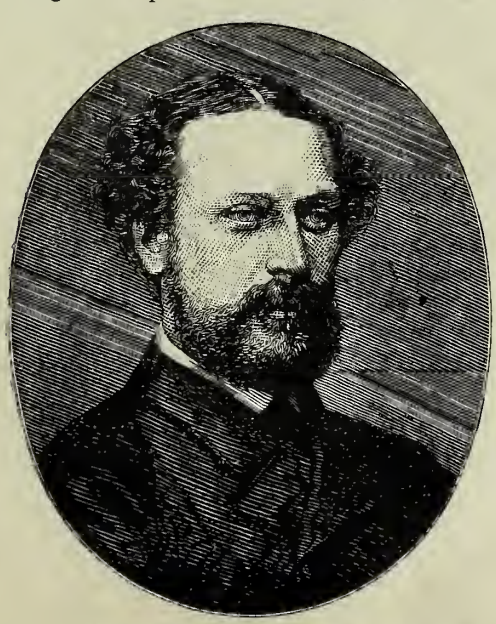
It was a great thing to place a Post Office Savings Bank in every town in the kingdom, it is a greater to place a savings bank in every house; it was a good thing for the Department to encourage the establishment of Penny Banks as it has done in the past and does still, but it is better to make itself a penny bank by giving the poor the means of safely hoarding their pennies until they reach a shilling, which can then be paid direct into the Post Office Savings Bank—an undoubted advantage, for excellent as the penny bank is as an institution, there is one important thing lacking in it—there is no direct Government security for the amount deposited with the managers, who may be ignorant, unbusiness-like, or may play ducks and drakes with the money of poor depositors, although such iniquity is happily of rare occurrence.

Now, having seen what has been done for beginners in thrift, let us look at the provisions of the new Act for the purchase and sale of Government Stock. In case the reader may have only a vague idea of "Stock" as a thing belonging to the world of brokers and the Stock Exchange, it may be stated that the securities known as the "Funds," or "Government Securities," are the various kinds of funds representing the National Debt of Great Britain and Ireland. The Stocks that pay interest at a uniform rate of three per cent., and to which the new Act is applicable, are Consolidated Annuities, commonly called "Consols," which are the most current; New Three per Cents., and Reduced Three per Cents. Every purchaser of Government Stock, however small or large his purchase may be, becomes a "fundholder," associates his interests with the stability of the State, and becomes a creditor of the whole country. There is nothing in



RIGHT HON. HENRY FAWCETT, M.P., POSTMASTER-GENERAL.
(From a Photograph by the Stereoscopic Company.)

finance more desirable than that as many people as possible should have, as creditors, a close interest in the State; for there is nothing which tends more directly to make men peaceable and to put down and keep down the spirit of revolution. Well, all this can be done by any man who has £10 or upwards to invest, and in return he will get a certain three per cent. for his money and absolute security, so that his nest-egg need never be disturbed. The machinery for effecting this investment is simplicity itself. A man having from £10 to £100 to invest has but to deposit it at any of the 6,233 post offices and ask for an investment form, and having filled it up according to the printed instructions, he will send it,



MR. S. A. BLACKWOOD, C.B., SECRETARY TO THE GENERAL POST OFFICE.
(From a Photograph by the Stereoscopic Company.)

without paying postage, to the Controller of the Savings Bank Department. The transaction is then dealt with by the Savings Bank, the Government acting as stockbrokers of the small investor, in the same manner that stockbrokers act for the rich, and yet without encroaching on the business of the ordinary stockbroker. The Government agrees (1) to purchase Stock at the current price of the day, such price being furnished daily by the National Debt Commissioners; (2) to purchase at a fixed charge, ranging from 9d. for an amount not less than £10 and not exceeding £25, to 2s. 3d. for an amount not exceeding £100; (3) to forward a certificate of the purchase by post; (4) to debit the purchaser's Post Office Savings Bank account with the amount of investment and commission, and credit him with the amount of Stock in a special Stock Register; and (5) to receive on his behalf the half-yearly dividends, to add the



MR. T. G. RAMSAY, CONTROLLER OF THE SAVINGS BANK DEPARTMENT.
(From a Photograph by the Stereoscopic Company.)

amount to his deposit account, and enter the same in his deposit-book on its next receipt for examination.

Sales are effected with the same facilities that purchases are made, relieving the fundholder of all trouble in the matter. When a sufficient balance stands to the credit of a depositor, he can obtain on application a Stock Certificate with coupons annexed for dividends to be paid to bearer at the Bank of England or any of its country branches. These Certificates are obtainable for £50, £100, or £200.

It is not necessary to go into further details here. Mr. Fawcett has prepared an admirable little book, entitled "The Post Office and Aids to Thrift," a copy of which may be obtained at any post office free of charge, and it contains, amongst other important matters, a section clearly explaining the rules relating to the purchase and sale of Government Stock.

Signal success has attended the introduction of this useful measure. During the first ten weeks, counting

from the 22nd November, when the Act came into force, the amount of stock purchased by means of the new machinery was £232,953 ; of this sum only £1,289 was sold ; the number of persons purchasing stock was 3,700 ; and the average amount of investment, £58. Of this sum of £232,000, £138,000 was deposited in the Post Office Savings Bank for the purpose of immediate investment, and £92,000 was withdrawn from existing accounts. From that time to the present there has been steady business ; but owing to the exceptionally high price of Government Stock the progress has not been so rapid as it otherwise probably would have been. At the end of March last 6,974 investments had been made, amounting to £382,139 ; 208 sales, amounting to £7,395, had been effected, while 63 Stock Certificates, for £4,950, had been issued.

In proportion as the facilities offered to investors are made widely known, and the nature of the investment is understood, will the measure progress ; for the provisions of the new Act exactly meet the need of the middle classes, for whom hitherto there have been so few chances of making small and safe investments. It is possible now for a depositor to have as his nest-egg £150 principal, and £50 interest, in the Post Office Savings Bank, and at the same time to have £300 in Consols, or £500 altogether, and for this amount the credit of the whole British nation is given as security for due repayment.

It is proverbial that the middle classes of this country are not so saving as their poorer brethren, and the English, as a whole, are far behind many other nations in thrift. Silly extravagances of fashion —absurd attempts to keep up on £300 a year an appearance equal to that of an opposite neighbour whose income is £1,000—a reckless expenditure in "outings," as though happiness were to be found anywhere and everywhere except at home—an unreasonable desire to purchase everything that is cheap, whether useful or otherwise—a restless ambition to keep abreast of every last new style in everything—these are the enemies of thrift among the middle classes, as the ale-house and the music-hall and bad cookery are of the lower classes ; and to all the knowledge of the existence of the Post Office Savings Bank, with its extended spheres of usefulness, should come as an appeal to common sense and right feeling.

It is satisfactory to know that the new schemes have in no way hindered the progress of the old forms of Savings Bank business, but, on the contrary, they have received an extraordinary impetus. During the first three months of the present year there was an average of no fewer than 13,362 new accounts open *each week* in excess of the accounts opened during the first three months of the preceding year—a prodigious increase, altogether unprecedented in the annals of the Department.

Mr. Fawcett has applied his active mind most vigorously to extending the sphere of the operations of the Post Office Savings Bank, so as to bring its admirably arranged machinery within easy access of every householder in the land ; and his desire to help all who are willing to help themselves or others has been shown in a variety of minor ways, as, for an example, in sending clerks to attend at the business houses of large employers of labour on pay-day, to receive money as Savings Bank deposits before it has had time to burn holes in the pockets of the workmen ; and as another example, and in another sphere, in the employment of deaf-mutes in the Savings Bank Department to perform duties of a mechanical nature, such as the sorting and arrangement of official documents, a class of work singularly suitable for the unfortunate people whose affliction unfits them for almost every other occupation.

There are still improvements which might be effected in connection with Post Office Savings Banks, and, if they are feasible, there is no man more able or willing to give them effect than the present Postmaster-General. One is that if £30 is to continue the maximum amount of deposit in one year, that sum should relate to the actual amount on deposit. As the rules now stand, if a man invests in January £30 and, to meet some pressing need, withdraws say £10 or £20 in March, he may not replace that amount so as to bring the deposits again up to £30, but must wait until January of the succeeding year. Everybody will see how disadvantageous this is to a man who draws his salary quarterly and who has to pay rent on quarter-days. It is a source of vexation to depositors, and seems to outsiders an unnecessary construction of the rule that "no one may deposit more than £30 in any one year."

Much of the success that has attended the operations of the Post Office Savings Bank within the past twelve months is undoubtedly due to the publicity which has been given to the subject, but there are still tens of thousands in our land who ought to be depositors and are not, simply because the matter has not been placed before them in an easy and intelligible fashion. There is a wide field of usefulness open to preachers of thrift, and if a statement recently put forth by an eminent accountant, writing on the Report of the Chief Registrar of Friendly Societies, be true, that "two millions of working men belong to societies which are actually insolvent, and must eventually collapse," there is urgent need that the safe and sure methods of investment provided by the Post Office should be made known widely and rapidly. Nothing hinders the cause of thrift and temperance more than these improvident provident societies, which hold out tempting baits of 5s. a week when sick and a splendid funeral when dead, but do nothing except annually plunder the poor of their money.

We are satisfied that every aid would be given by the Post Office authorities to any crusaders who would go forth to wage war against the recklessness and extravagance of the thriftless, and to proclaim the fact which cannot be too often repeated, that the safest place for the money of those whose "little all" is involved, is where absolute Government security is given for its due repayment.

EDWIN HODDER.

A FEW WORDS ABOUT FIRE INSURANCE.

FIRE insurance, the policy for which is simply a yearly contract between the insuring company and the insured (the former agreeing to indemnify the latter against the possibility of loss arising from any fire happening on his premises), has often been misunderstood, and insurances are often made without a proper understanding, on the part of the insured, of the contract entered into. We therefore propose to explain as briefly as possible the points to be considered by a person about to insure his premises or goods against fire.

In the first place, it must be borne in mind that by the printed conditions of the policy the insurance company undertakes only to guarantee the insured against loss. No matter for what amount the insurance may be effected, the company will not, in the event of a loss, pay more than what may have been the actual value, at the time of the fire, of the goods destroyed. For instance, the cost of a new building would not be paid should an old building or one wanting repair be destroyed, nor would a half-worn-out carpet or article of furniture be replaced by a new one. In effect, the company says, "You may insure your goods for any amount you like, but should a fire happen, you must give us as detailed an account as possible of the articles destroyed or damaged, showing their values at the time of the fire." For his own guidance, the insured should therefore keep at least a rough inventory of his effects, and revise it from time to time. It is a curious fact that, even with the most careful, the preparation of such an inventory generally shows household furniture in particular to be under-insured, the total value being almost invariably under-estimated.

While an insurance on household goods, clothing, &c., effected by the head of a family includes the property of all those members habitually residing with him, it would not protect the goods of a lodger or visitor, or of any member of the family not customarily residing under his roof. Nor does it insure any of his own property stored in any premises other than those mentioned in the policy; and therefore in the event of such an ordinary occurrence as a change of residence, notice should be given to the insuring company of the expected time and places of removal, in order that the property may be held secured by them against loss by fire in either house. Should any member of the family, too, be visiting at a friend's, and a fire happen there, the insurance would not cover the clothing and property while away from the place mentioned in the policy. All these contingencies can, however, be provided for by special insurances.

The question of what is loss by fire has often arisen, and has at times been the subject of litigation. It is now generally settled that, with the exception of damage from explosions of gas, actual ignition must take place. For instance, damage from lightning, or gunpowder explosion, would not be paid for, unless the goods were actually burnt. It may here be mentioned, too, that articles destroyed by fire occasioned through their own natural fermentation or heating, or while undergoing any operation in which fire-heat is necessary, are placed out of the insurance by the printed conditions of the policy, though the value of any other articles injured by the spread of the fire would be paid by the company.

While effecting an insurance, a full and proper description of the premises in which the goods are kept or placed must be given to the company. Thus, the house must be described as detached, semi-detached, or part of a row of houses; and the construction of it should be mentioned, if built of brick, or stone, or a combination of both; or if timber (other than for floors, &c.) forms part of the erection, it must be so described. If any business or profession be carried on in the house, it must also be mentioned, and if other houses near be occupied as shops, or for any manufacture, notice must be given. As the risk of fire, and consequently the risk to the company (and the rate they must charge), is affected by these particulars, any omission to name them would in all probability vitiate the insurance.

In the case of household furniture, it was customary at one time for different insurances to be made (1) on Ordinary Furniture, (2) on China, Glass, and Looking-glasses, (3) on Musical Instruments, (4) on Pictures and Prints, &c., (5) on Curiosities—and so on. The rates charged for insuring these varied from 1s. 6d. to 5s. for every £100 insured—that is, if the goods were in ordinary brick or stone-built dwelling-houses. At the present time it is more customary to insure household goods of every description, and wearing apparel, jewellery, &c., in one amount, the rates in that case being—

For £100 2s. 6d.
For £200 4s. 6d.
For £300 and over, 2s. for every £100.

By the printed conditions of the policy, £10 is the highest amount recoverable for any one picture or curiosity, unless some special arrangement be made with the company, and expressed on the face of the policy. The highest limit allowed, without extra payment on the rates mentioned above, has been 10 per cent. on the total amount insured; but any value can

be arranged for by naming the picture and its artist, or otherwise describing it, and by paying for the insurance at a higher rate (usually of 4s. 6d. per £100).

When the house belongs to the householder (or when he is bound by the terms of an agreement or lease to insure the building, the amount to be so insured being usually stated in the document), the loss likely to arise from fire can be insured ("on the building") at, for a private dwelling-house, 1s. 6d. for every £100. Should a fire happen, and the premises become uninhabitable, it is not generally known that, even in the event of a yearly tenancy, the householder is legally bound to pay rent until the end of the term. It is therefore advisable for a person so situated to insure his house for the amount of one year's rent, that being a length of time in which it is certainly possible for the premises to be rebuilt. It is not, too, generally known that, by a special Act of Parliament, any person interested in premises destroyed by fire (and knowing the company with whom the building is insured) can call upon the company to see that the amount for which it is insured be spent in the reinstatement of the building. In the case of leases, however, this would not be necessary, as it is the custom for a stipulation to be made for the building to be insured in the joint names of both landlord and tenant, in which case neither could touch the money without the consent of the other.

If there be any outbuildings (such as a greenhouse or workshop) attached to the premises, separate insurances must be made on both buildings and contents, the rates charged varying, of course, with the uses made of the outbuildings. Stables, and horses therein, cow-sheds and cattle, harness-rooms and harness, coach-houses and carriages, and in fact all buildings and goods not coming under the heading of dwelling-houses and household furniture and clothing, have to be separately insured and arranged for.

If a portion of the house be used for a workshop or for any trade or profession (even for an artist's studio, for instance), a statement to that effect must be made to the insuring company, and a separate insurance effected for any goods or tools used or kept there.

Agricultural and trade insurances open up too wide a field to be discussed in an article of this nature, as each trade comes under some special condition or rate, for which the companies either have a scale of charges, or it becomes a matter of agreement between the company and the insured.

When the application for insurance is made, and all the necessary particulars are given, the company gives the insured either a full printed receipt for the premium or a provisional deposit receipt, which fully protects the property pending the delivery of the policy. This receipt should be examined with the view of ascertaining if it contains any printed condition limiting the protection to any stated time (fifteen days from the date of the receipt, for instance). Should it do so, care must be taken that the policy is received within that time, or that the company extends the protection by either a fresh form of receipt or an endorsement of the old one.

When received, the policy and the printed conditions on its back should be carefully read over, to see that it fully describes the property intended to be insured, and that there is nothing in the conditions which cannot be accepted or complied with. If a fire were to happen through the presence of anything forbidden in these conditions, or through the omission of any requirement, the insurance might become worthless—and the plea of ignorance of the stipulations would avail nothing.

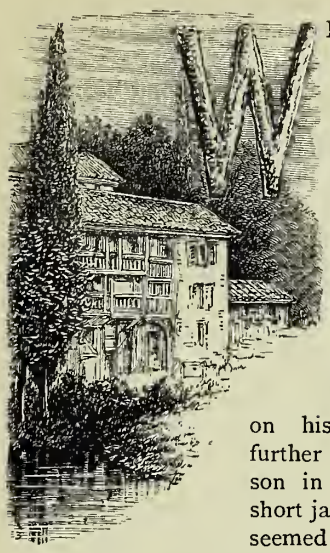
It would, where practicable, be advisable that the policy and its renewal receipts, together with a rough inventory of the property insured, should be kept elsewhere than in the premises containing the goods. Should a fire happen, these documents then would be at hand to prove the loss and to make the claim on the company—though, as a matter of fact, no instance has occurred of any respectable company refusing to recognise its liability from the absence of these documents, the copies in the office books being recognised by them as sufficient evidence of the insurance.

Renewals of the original insurance must be always made within the fifteen days of grace allowed by the companies, as the omission to do this would cause the policy to lapse. If the insured is able to make a statutory declaration of his intention to renew the insurance, and a fire happens within this time, the loss would be made good by the company, they simply treating the amount of the yearly premium as a debt due to them.

Should a fire occur, the insured is bound to act as if he was uninsured, doing all he would do if all the loss would be falling upon himself, but not moving anything off the premises unless absolutely necessary for their safety. On the arrival of the brigade (or a representative of the insurance company) he would surrender everything into their hands, as being more competent to deal with such emergencies. Within fifteen days he must deliver to the company as closely detailed a list as possible of the articles destroyed, with an estimate of their value at the time. He must furnish all the particulars in his power to substantiate the claim, give any explanations and details that may be asked for by the company or its representative, and be prepared (if it should be required) to make a statutory declaration regarding its correctness. Care must be taken that the claim is a fair and proper one, as should the company on examination suspect any exaggeration, considerable trouble would be given in settling for the loss; and if any fraudulent exaggerations were proved, they would undoubtedly vitiate the policy.

W. J. W.

YOUNG MISTRESS' RIDE.



"WHAT might he have been worth, now, James Ranson?" said the blacksmith.

"Worth?"

"Yes: hard cash. What would you have given for him?"

The man addressed was a short squatty individual, with very high shoulders and very bowed legs, who had "stables" printed on his countenance without further evidence about his person in the shape of a close short jacket, tight trousers that seemed like a drab outer-skin, and a nattily tied cravat secured with a horse-shoe pin. He had a strand of hay in his mouth, which he chewed in a one-sided manner, like a horse, giving his lips a twitch every now and then to get a better hold, while, in company with a hunting crop, he carried a little tuft of hay pulled out of farmer Brown's hayrick, by way of forage.

James, the squire's groom, had encountered Agley, the blacksmith, by the finger-post at Burritt's Corner, and they had stopped to talk in sight of Terry's.

"Terry's" was the "White Lion," where James Terry was licensed to sell beer by retail to be drunk on the premises, though generally speaking the visitors, who were few, preferred to drink it off the premises, seated on one of the benches beneath the poplar-tree by the door, the said benches having been placed there under a belief that the tree was shady, which the said poplar certainly was not. But, as Terry said, "he didn't care whether the people drank his beer on or off the premises, or whether they didn't drink it at all;" for the butchering was his trade, a fact plainly announced by an unhappy sheep once a week, who went into the premises woolly and came out to be hung up by its heels, as if requesting those who passed to examine its quality and fat.

Squire's groom and blacksmith stopping by the finger-post to talk, excited James Terry, who buckled the strap which supported his steel a little more tightly, and walked towards them, to the great annoyance of Mrs. Figg's goose, which felt itself called upon to hiss loudly, and lead its yellow goslings away, the butcher being a dangerous person as to sheep, and having been known before now to do a stroke in fowls.

Before Terry had reached the finger-post, Figg, who saw him go by, and who had nearly earthed a whole row of potatoes in his garden, stood straight up, rested one hand on his hoe, laid the other across his back, and bent himself a little out of the perpendicular, before sighing deeply at having to work so hard, and then, after a dubious glance at a window where Mrs. Figg could be seen making prismatic suds, the steam from which went up amongst the overhanging roses, stole cautiously off after Terry.

"Morning!" "Morning!" was the salutation given and returned, as these two joined the groom and blacksmith, the latter having made himself an uneasy seat of his basket of tools—uneasy, for a stuffing of files, pincers, and hammers is not conducive to comfort.

"Hullo!" said a voice just then, and a yellow legging seemed to be thrown over the gate leading into the wood, then came another legging, and a much-worn brown velveteen coat, and lastly, from amongst the shady hazel boughs, the black-whiskered mahogany-tinted visage of Tewson, squire's keeper.

"Mornin', Tewson," said Terry.

Tewson nodded, laid his bright-barrelled double gun, from which all the browning had been cleaned, across his knees, and balanced himself on the top bar of the gate.

"He's a dead un at last," said the blacksmith to the keeper.

"Is he, though?"

"Ah, that he is. I was just asking James Ranson here what he was worth."

The groom bit a piece off the hay-strand, examined the remainder with a critical eye, and feeling his importance, waited to be questioned.

"I could put a price on him to a pound," said the butcher.

"Oh, ah, we all know what you'll say," said the blacksmith; "but what do you say, James Ranson—what was he worth?"

"Worth?" said the groom, taking a fresh strand.

"Ay, worth."

"Thirty shilling."

"That's what he's worth now," said the butcher. "Five-and-thirty I'd give, for he was a big, fat horse."

"He, he, he!" laughed Figg. "Terry would dress him and send him up to town as beef."

The butcher's face grew a little more red, and he turned upon the last speaker.

"I dessay that's meant to be very funny," he said, "but it might do me harm. Was there a bad shilling in that last money you paid me, Mr. Figg?"

"No, that there wasn't," was the indignant reply.

"Ah, perhaps not, but it's such a precious long time since you paid me anything, that I had most forgot."

The butcher gave the others a peculiar look, and then every one chuckled except Mr. Figg, who gave an unoffending thistle a severe chop.

"I say," said James Ranson emphatically, "as Black Prince wasn't never wuth more than thirty shillings."

"Why?" said blacksmith.

"Why!" said the groom scornfully, "because he warn't. Ask Tewson there; he knows."

Tewson the keeper screwed up his face so that it seemed to be all black beard and whiskers, and began to polish his gun.

"Why, he used to eat twice as much as any other horse."

"Good for trade," said Terry.

"Then he was never happy if he wasn't kicking off his shoes."

"Good for trade too," said Terry again, with a wink at the blacksmith.

"And the older he got the nastier he got. He'd roll that off-side eye of hisn till he showed it white, and then it was 'ware teeth."

"What! used he to bite?" said the blacksmith.

"Bite!" said the groom, "why, he was allus biting. Ask Tewson there whether he didn't get hold of his shoulder."

Every one looked at Tewson the keeper, who left off polishing his gun-barrel and pulled the collar of his velveteen jacket a little on one side to examine the damage, but awaking to the fact that he had on another jacket, he grunted and went on polishing some imaginary rust from his gun.

"His manger and rack were all in splinters, and as for the stalls and the horse-box, you might make matches of 'em."

"What a brute!" said Terry. "You must be glad you ain't got him to shoe any more."

"Well, he weer a rum un," said blacksmith, "but then he wanted something fresh every week. But he's a dead un now, and there's an end of him."

"How came the squire by him, James Ranson?" asked Terry.

"Oh, just like his obs'nit ways," said the groom. "Goes and buys it hisself. I told him not to, but he would be so clever. Knows no more about a horse than I do about being a butcher, or shoeing a horse, or sowing taters; but he would buy it."

The groom's adroit compliment to others' knowledge was favourably received.

"Every man to his trade, cert'nly," said the blacksmith, "and horses is as much a trade as butchering, or gardening, or gamekeeping."

"Of course," was chorused, and Tewson, being apparently satisfied about the spot of rust on the gun-barrel, began to polish the stock.

"What do you think he died off on?" said Terry.

"The vetinary sudgeon says it was 'similation of the 'sorbents, but I say it was old age."

"Think he was old, then?"

"Old!" said the groom sharply, "old's nothing to it. He was hancient, that's what he was; and he was always bolting."

"Yes, he was that," said Terry.

"A hoss as once takes to bolting is never good again," said the blacksmith; and then all looked at the gamekeeper, who nodded his head, but evidently this being wrong he shook it, and then took refuge in his gun.

"'Member Miss Helen's ride?" said the groom.

"Ride, eh?" said the blacksmith. "I call it a race."

"Poor lass! it was a runaway," said Terry rubbing his ear. "I says to my wife as I see her rush out and throw up her hands, 'Come in, lass,' I says, 'and get ready a bed; they'll bring her here safe. I'll run across the fields for a doctor, but I'm afraid it'll be a coroner's job;' and as I ran for my coat I see you go by with your apron flying, and your sled-hammer in your hand."

"What was you going to do with your hammer?" said Figg.

"Do!" said the blacksmith flushing up and involuntarily wetting his hand, "if I could have got within reach of that old black horse I'd have smitten him down dead."

"Ha!" said the keeper, and he looked at his gun as if he would have tried to shoot the runaway.

"How was it?" said Terry.

"How was it?" said the groom scornfully, "why, master's obst'nacy. He says to me one morning, 'Look here, James, Miss Helen's pony don't seem very fit, she may as well ride Black Prince to day.'"

"'Ride Black Prince, sir?' I says, 'why, she couldn't hold him.' I might have knowd better, for master had got one of his gouty touches just then, and so sure as one of those is on, you've only got to go against him to make him obst'nate as a bull. It's my belief," said the groom, looking round, "that if I was to say at one of those times, 'I don't want double wages, and I won't have 'em,' he'd make me have 'em on the spot."

"I think I should try, James Ranson," said Terry, with a knowing look; but it fell on barren ground.

"'Hold him! nonsense, sir!' he says. 'Put on the side-saddle, wrap a horse-cloth round you to seem like a habit, and canter him round the field,' he says.

"Just then up comes Miss Helen.

"'I've been telling James you shall ride Black Prince, my dear.'

"'Why, papa dear,' she says, clapping her hands, 'he's as big as a cart-horse.'

"'He's a magnificent beast, my dear, and you wanted a long round. You can go as far as you like.'

"'P'raps Miss Helen might like to ride Snowball, sir,' I says, 'and I'd ride Prince.'

"'Hold your tongue, sir,' says master sharply; and after that I wouldn't have interfered if he'd wanted Miss Helen to ride a hunbroken colt. However, I goes into the stable and puts on a good stiff curb, claps on the side-saddle, gets a horse-cloth on, when the first thing Prince does is to lay back his ears and run straight at me, grinning and showing his teeth like a demon. What did I do, but I ups with the stable-fork and gives him such a crack across the nose as made the bone rattle again. At me he comes once more, and I hits him again; and so on half a dozen times, when he was a bit quieted down. And then I slips on the biggest and sharpest spur I'd got, and I took him round the field, letting him have that spur till I made him bleed again. I made his mouth pretty sore, too, with the big curb, I can tell you; for I meant to teach him what it was to try and bite me."

The butcher looked at the blacksmith, and the latter wiped the perspiration from his brow with his bare arm.

"I give him such a basting," said the groom, with



"THE HORSE DRAGGING HIM A GOOD FIFTY YARDS BEFORE HE WAS STOPPED."

"*YOUNG MISTRESS' RIDE*" (*page* 535).

a grin of relish, "and took him in at last reg'larly tamed, and handed him over to the helper to rub down. 'Give him a good taste of the fork-handle,' I says, 'if he ain't quiet;' and, my eye, I did hear him rattling it about the old brute's ribs."

Figg moved his hand up and down the shaft of his hoe, as if wondering whether that was the size of the fork-handle, while the keeper sat looking stolidly on, now rubbing his gun-stock softly, now with a good deal of force.

"Afternoon comes," continued the groom, "and Prince was dry, but when I mounted fat old Snowball and took hold of the rein, he kep' looking at me very nastily out of his eye. He was pretty quiet, though, as I led him up to the front door where master and Miss Helen was waiting, she looking very bright and pretty in her dark green habit and black felt hat and veil, and little white collar and cuffs, and her gold necklet, not a bit brighter than her long hair. She goes up to Black Prince and rubs his nasty old nose, and gives him a couple of apples, fouling my nice clean snaffle and curb-chain; and then the little steps were brought, and she mounted.

"'Take care, my dear, and don't fret his mouth with the curb,' says master; and I laughed to myself as I thought how I'd made it bleed, though I was in a bit of a fidget for fear the gov'nor should see the marks of the spur. But once Miss Helen was up the habit covered all that, and away she went, Prince at a lumbering trot. Then we had a good long round—eight mile or so—the old hoss being much more steady than I expected to see.

"Miss Helen looked bright enough, but precious little on that great lumbering horse; and we were getting well on towards back again, and I felt a bit disappointed, not as I wanted the gal hurt, but I felt as if I should like us to have a bit of a acciden', just to show master how wrong he was not to trust to his groom, when just as we were leaving the cottages by the 'pike gate, old Mrs. Denny comes to her door, and throws a pail o' water out *splish*, *splash*, right under Prince's nose."

"Well, that's enough to frighten any horse," said Terry sharply.

"Well, it frightened Prince," said the groom grinning. "He stops short for a moment, shivering in all his limbs, then he gives a loud neigh, and then he lays out, and away he goes full gallop, tearing up the dust as he went down the road. I sticks the spurs into Snowball, lays the whip into him, stands up in my sterrups, and away I goes after her, while she sat as plucky as could be in the saddle, with her hat off but hanging to its string; and do what I would, I couldn't get near.

"I shouted to her to hold on, but I knew it was no use, and I saw as well as could be what would happen, for, going at that rate, when Prince had got here he would have turned short round, gone on his side, and the poor gal would have been thrown. 'And a lesson for master, too,' I remember saying to myself, though, of course, I was sorry for poor Miss Helen as I didn't want to be hurt."

The groom's hearers each drew a long breath.

"On we tears. My word, we did go past cottages and hedges, and seemed to fly; and there was Black Prince pounding away till I saw as plain as could be what was to happen. By your place he goes," continued the groom, nodding to Terry, "and up goes your missus's hands. You and your dog was out afore I got up," he said, nodding to the blacksmith. "There was a goose and her young ones ahead, and I see Mrs. Figg and a little Figg at the gate, she with one arm stretched out, and her other hand on her side. And then all at once—how he did it I don't know—I see a boy jump at the reins——"

"Young Tom Tewson!" said Figg, and the gamekeeper uttered a loud "Hah!"

"Jumps at the reins, I say, and hung on to Prince like a good un, the horse dragging him a good fifty yards before he was stopped, snorting and all in a lather, shivering in every limb; and as I galloped up, I felt as if I could have killed him."

"Ah! it was a sight," said the blacksmith; "and she wouldn't get down, but said she'd ride home."

"Yes, so she did; and give Tom Tewson a sovereign," said the groom, "which was too much."

"Not a bit," said Terry. "Why, she'd most likely have been killed if it hadn't been for Tewson's boy."

"Ah! well," said the groom sulkily, "Tom Tewson's got to be groom at the Hall, so he's all right."

"And you're going, ain't you, James Ranson?" said the blacksmith.

"Yes, I'm off. I won't stand master's temper. Him and I can't agree."

"Ha!" said Terry, as he turned to go away, "then the horses will have a holiday."

"What d'yer mean?" said the groom angrily; but Terry did not speak.

"I tell you what I mean," said the blacksmith, rising and picking up his basket, "and if I was sure as I should never shoe another horse at the Hall I'd say it."

"Say what?" said the groom insolently.

"Why, that a man with a temper like you isn't fit to have charge of a horse. It's my belief as you spoiled Prince just out of nastiness, and to spite your master."

"Who cares what you say?" cried the groom. "Yer head's as thick as yer anvil. Here, come on, Tewson, I'll walk through the woods with you."

"That you won't," growled the keeper with a voice as hoarse as a mastiff's. "But if you do, I'll cut the first ash stick I see, and give you the biggest trouncing you ever had in your life. Why, it was through you our young lady was a'most killed."

"Yah!" ejaculated the groom as idle Figg turned away, "it give your boy a place."

"And a good job for the squire's horses," said the blacksmith, "that's all I can say."

The next minute the groom found himself alone, and stood viciously cutting at the thistles round the finger-post. "A pack of fools!" he cried angrily—an opinion held of the whole world by the set of men who brutally misuse the horse.

GEO. MANVILLE FENN.



Words by REA. *Music by* GEORGE COSBY.

RECIT. *lento.*

VOICE.

PIANO.
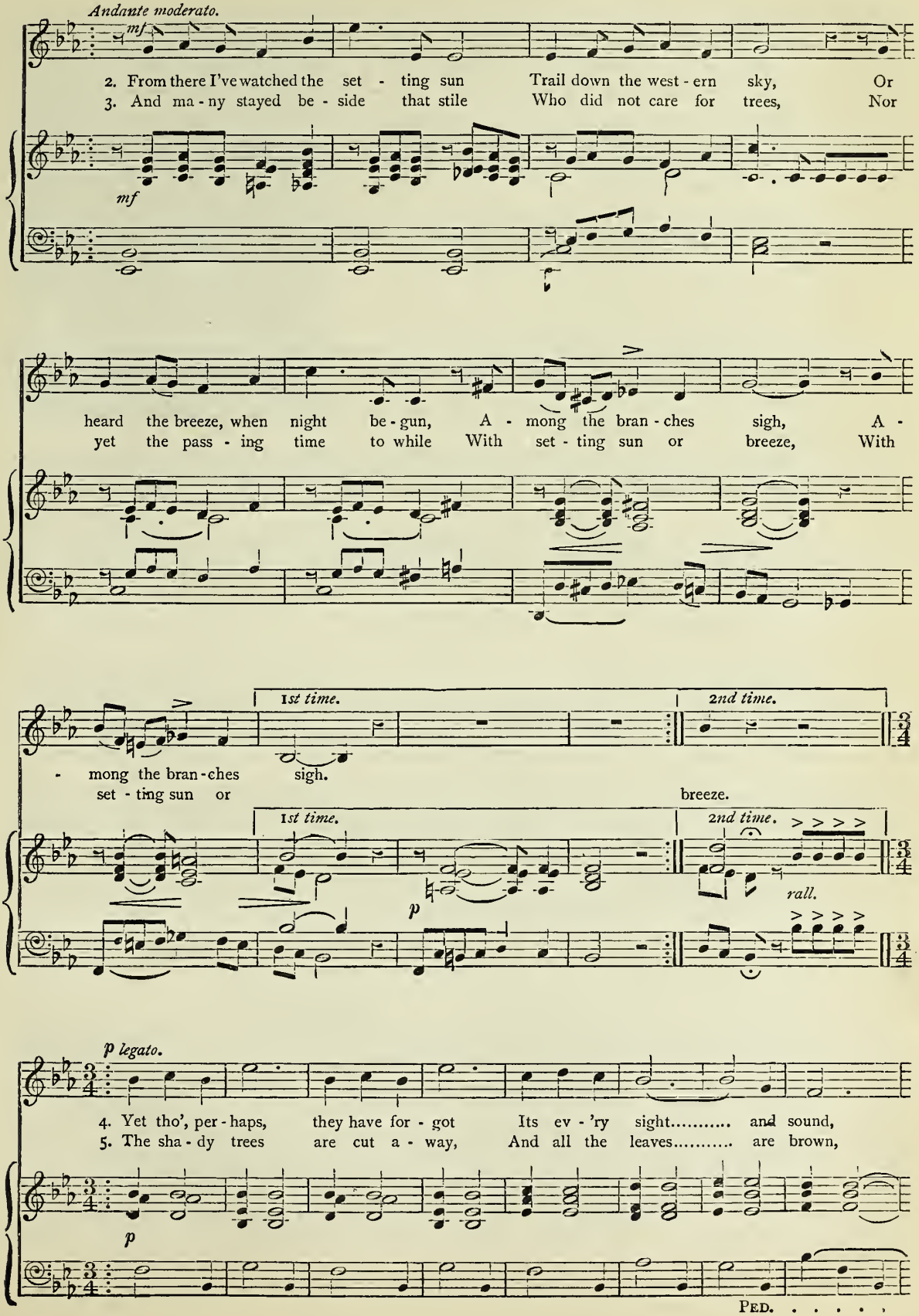
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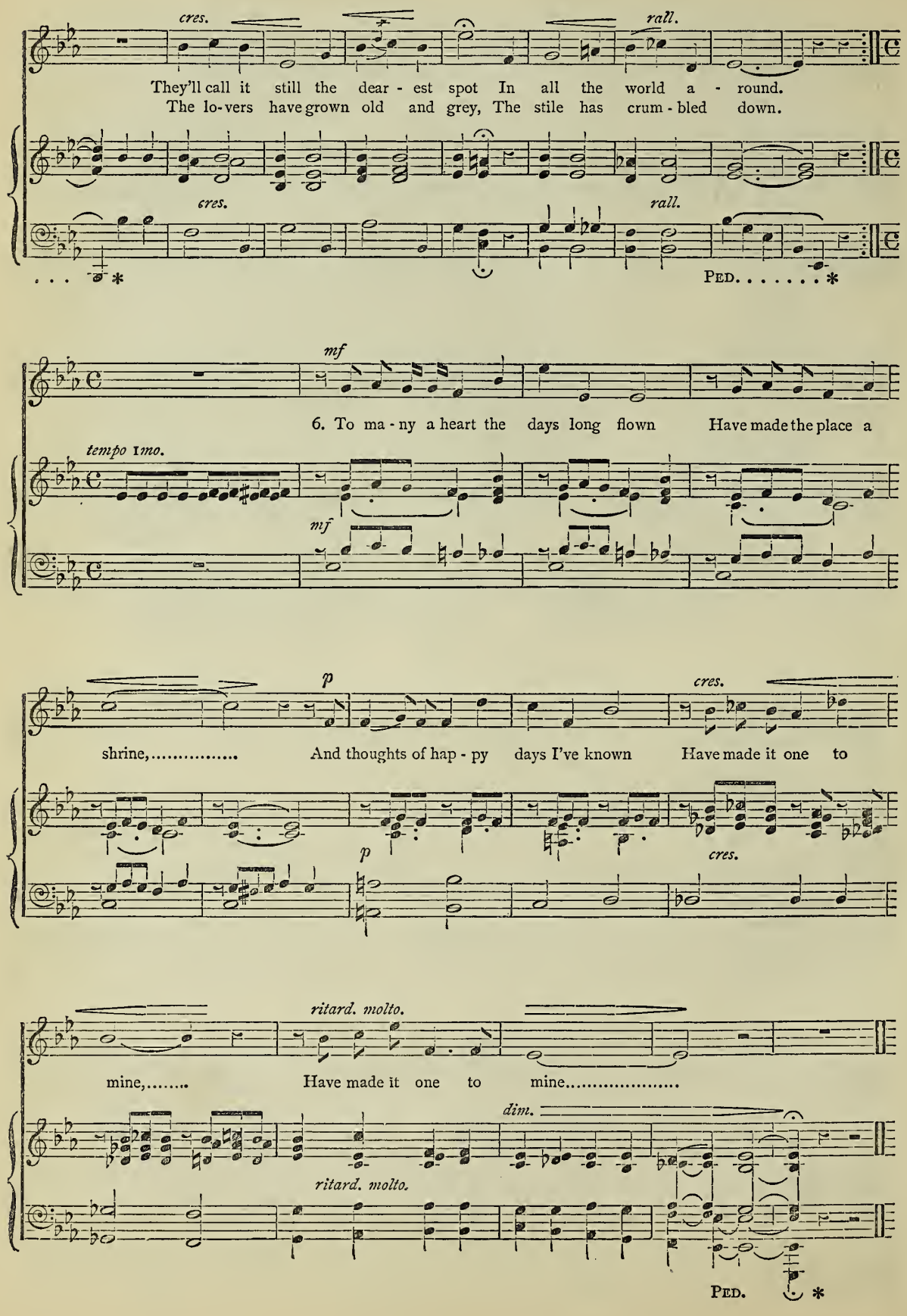
1. I know a wood far, far a - way— There was a rus - tic stile, By which I've

PED. *

ten.

stayed at close of day To rest and think a - while.


Andante moderato.
mf
2. From there I've watched the set - ting sun Trail down the west - ern sky, Or
3. And ma - ny stayed be - side that stile Who did not care for trees, Nor
mf
heard the breeze, when night be - gun, A - mong the bran - ches sigh, A -
yet the pass - ing time to while With set - ting sun or breeze, With
1st time.
2nd time.
- mong the bran - ches sigh.
set - ting sun or breeze.
1st time.
2nd time.
p
rall.
p legato.
4. Yet tho', per - haps, they have for - got Its ev - 'ry sight..... and sound,
5. The sha - dy trees are cut a - way, And all the leaves..... are brown,
p
PED.


cres.
rall.
They'll call it still the dear - est spot In all the world a - round.
The lo-vers have grown old and grey, The stile has crum - bled down.
cres.
rall.
PED. * *
mf
6. To ma - ny a heart the days long flown Have made the place a
tempo 1mo.
mf
p
cres.
shrine,..... And thoughts of hap - py days I've known Have made it one to
p
cres.
ritard. molto.
mine,..... Have made it one to mine.....
dim.
ritard. molto.
PED. *

GARDENING IN AUGUST.



AUGUST is perhaps as busy a month as any in our garden. Indeed, it may be difficult to say which of the twelve months is not a busy one with us, unless perhaps we except under certain circumstances the very depth of the winter, or a period of prolonged frost and snow, when we can do little outside, and are driven to find work under our glass. But, unhappily, it is in this very month of August that with not a few of us the garden is most likely to be neglected; for at least once a year those of us who are at all able to do so, think it necessary to escape from home, no matter where that home may be. It is the great holiday month *par excellence*, and we are all rushing away. Was it not Cowper who said, "God made the country, and man made the town"? Sydney Smith, we believe, made an alarming suggestion as to who was the probable fabricator of the so-called "suburbs." While, then, we feel unqualified pity for those whose duties enforce a residence in sultry August under the shadow of chimney-stacks, rather than hay-stacks, we often wonder why those whose lot is cast among God-made sounds and scenes should select this same time of the year for a flight to the artificial stucco of a watering-place parade, or to the well-developed odours of some heated Continental city. As we have just adverted to Sydney Smith, it will not, we hope, be trespassing beyond the precincts of a paper on gardening, if we notice what he did for his parish in the way of horticulture. Mrs. Austin tells us, in her life of him, that "he set on foot gardens for the poor, and subsequently Dutch gardens for spade cultivation He divided several acres of the glebe into sixteenths, and let them at a low rent to the villagers, to whom they were the greatest comfort. It became quite a pretty sight afterwards to see these small gardens (which were just enough to supply a cottager with potatoes, and sometimes enable him to keep a pig) filled at dawn with the women and children cultivating them *before* they went to their day's labour; and there was great emulation among them whose garden should be most productive, and obtain the prize."

Our flower-garden is now, of course, in all its perfection. We shall however at once, as usual, notice some few of the more important routine operations suited to the time of year. August is the best month for the potting of auriculas. If, however, you find that upon the removal of the ball of earth the roots are not, or hardly at all matted and clinging to the sides of the flower-pot, your plant need not be disturbed, as it will go another season. Should repotting be necessary, be careful while getting your new soil in not to admit any little wireworm or centipede.

Any annuals that you may have in pots or elsewhere may perhaps want watering, shading, or stripping of their dead foliage; and some may require sticks for their support. This is our sultry and generally our hottest month, and therefore the most trying to our flowers, which will constantly, and at intervals, want a little general attention and freshening up. A slight stirring of the earth around their roots is also beneficial to them. Very much the same plan must be followed with our perennials, no matter whether they be in pots or in the open border. When they are quite out of bloom they may be propagated by parting the roots. And this you can do in two ways: either you can dig up your plant entirely, and then divide it into as many pieces as you can contrive with a good portion of root to each; or, with your spade, cut off a part for planting out, leaving the rest of the original plant in the soil. We prefer the first-named process, and then planting out the separated pieces in some good shady border. And perennial seed may be sown this month, but at the very beginning of it; indeed, it is safer to sow in June or July, so as to allow your plants to gain strength and make some advance before the winter sets in. For in this case your plants can then be set out in the open, in the places in which you intend them to bloom eventually. And August is, we know, the month for layering our picotees and carnations. Yet you ought not to begin your layering operations until the bloom of your plant has quite passed its best. The process we have very fully described on a former occasion. The leaves must be stripped off from the bottom, working upwards, and leaving on, of course, some four or five pairs at the top. You are then able to get well at the stem for the purpose of cutting it in the usual way. After you have pegged down your shoots, they must be carefully watered; and, indeed, all through the month or next six weeks following there must never be a scarcity of water for them, or failure to strike your layers will be the certain result. As we are mentioning picotees, let us also say that if you are wishing to save any seed of your plants, pull off the florescence—the petals, we mean—of all those flowers that have evidently passed their prime, and beginning to droop and fade, as sometimes if they are allowed to remain on when their beauty is past and gone, they decay and rot in the pod, especially in a wet season, and in so doing often decay the seed-vessels as well. Indeed, it is well in dry weather to collect the seeds

of all plants when they are evidently ripe, while the long stems and stalks of all flowers that you do not intend to seed should be cut off at once. Clear away, too, the dead leaves of your plants, as all this gives a neat and tidy appearance on your borders. And as to our box-edgings, we may with advantage repeat a caution against being too rough with the birch-broom. Very often you will notice that the bottom part of the box is bare and dry, and almost dead: the fact is that you have, doubtless very often unawares, torn ruthlessly off with your broom much of the lower part of the foliage of your box. And among our dahlias, of course, at this time of the year, the usual battle is going on between our watchfulness on the one hand and our old enemy the earwig on the other. To our utter mortification, we know how thoroughly the earwig mars the petals of the dahlia, so we trap him by every device in our power. This, indeed, is our great vermin and insect month; we get angry with the wasps, and they not unfrequently get angry with us. One crevice in a door, or one flaw even in wire network, they are sure to find out where any sweet attraction is concealed behind. The writer of these pages was much amused last summer, during a long delay at a rustic railway station, by watching a box on the platform, some two feet square, and to all appearance well nailed down. By its fragrance the box evidently contained fruit, and unhappily a little hole, probably caused by the falling out of a small knot in the wood, afforded a charming door of ingress for the wasps, the number of which that took advantage of such an opportunity on a sultry afternoon was perfectly wonderful, as the porter, who on the arrival of the train came to lift the box, evidently discovered to his cost. It was a useful lesson, however, for fruit-growers and gardeners, and one, we think, worth recording.

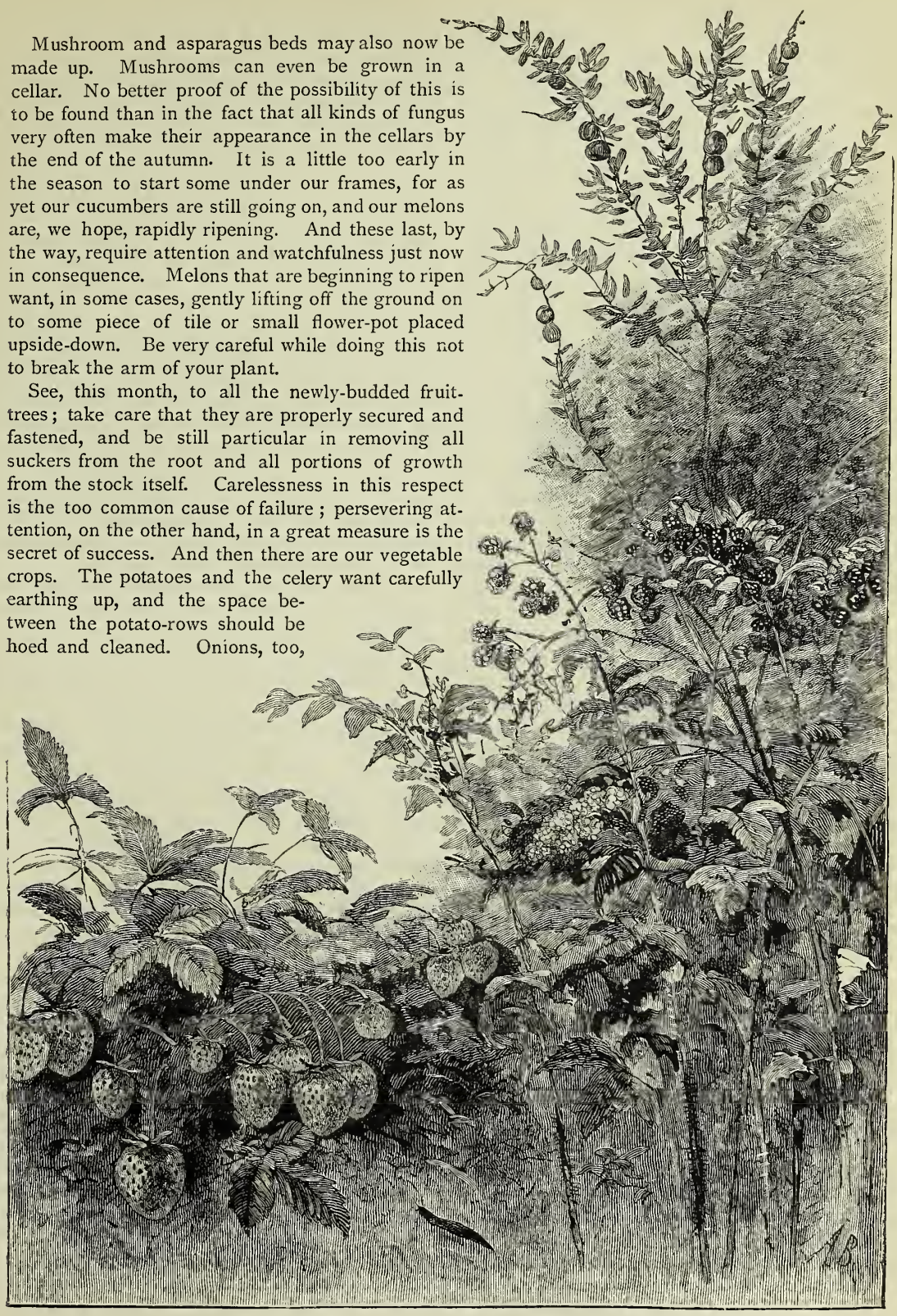
This is the month following our rose-budding, so we go very carefully over our collection of stocks and notice results. The chief thing, however, that we have been of course all along cautious in attending to, is the regular and complete removal of all growth on the stocks, that for some time keeps constantly making its appearance at all the joints. We want all the strength for the young bud, and when the stock is allowed to give only a divided allegiance to the bud, and the rest to some offshoots of its own, the unhappy bud must go to the wall. Not later than the end of the month, we must begin our annual but very necessary preparation of our stock of cuttings for the next season. It is a long and tedious process, and very often in a fine and dry summer season we are tempted to postpone our commencement of the work. The fine weather, for instance, which we had from the middle of August to the very middle of September, 1880, was perhaps a strong inducement to suppose that cuttings might be taken almost up to Michaelmas, but a sudden change of weather a fortnight before the goose-eating festival might render your stock of cuttings a very weakly one, as in a chilly and sunless autumn the young cuttings will not necessarily root so readily. "Take time by the forelock" then, and take cuttings early in the season. Previous to this, your other preparations will of course have been made: flower-pots washed, broken pieces of tile ready at hand for their drainage; and small boxes and pans also in readiness to supplement your flower-pots, which on these occasions so very often run short with us.

In a warm and favourable season, there is no occasion to house all your cuttings as soon as taken. Stand them all out in the open on boards, keep a look-out against slugs and snails, give occasional watering, and do not let your young cuttings be violently scorched up by a hot sun. The longer, in fact, your stock of cuttings is allowed to remain in the open, the hardier and healthier will it become, and so it will be better able to resist the perils of the winter—and winters of late years, as we all know to our cost, at all events in this country, have been a very serious matter. On the other hand, if your cutting stock is very quickly housed under glass, especially in a fine and prolonged summer season, your young plants will get drawn up and perhaps become too tall and delicate by the time that autumn or early winter has fairly set in.

Our fruit, vegetable, and kitchen gardens afford us just now plenty of occupation, let us hope of a satisfactory character. Our strawberry gathering is over. We anticipated great success by the end of May, and we trust that our dessert-table and our jam-room have by this time proved that our hopes were well-founded. But among our strawberry-beds we should not later than the 12th of the month be preparing our new beds. The strongest runners should be taken off and planted some six inches apart in a row, and the rows quite a foot apart. This should be on a good rich border. It is, however, a little late in the year to suggest another method, yet as it is the more approved one, and as we are on the subject of strawberries, we had better advert to it. The reason, as we know, that so many of our strawberries fail is to be found in that idle indifference shown by too many of us in removing the runners early in the season—early in June, for example. These, if allowed to remain on, run away with the strength of your plant and both diminish the size and impoverish the quality of the fruit. In the month of June, then, remove the healthiest-looking runners for the purpose of making new beds. Choose, of course, your best quality of strawberry, and the most prolific, or that which you find answers best in your garden. Now these runners should be layered in small pots in fairly good soil, and give them plenty of water. Then, in this present month of August, your pots of new strawberry plants should all be planted out in their prepared beds. And where flower-pots even are with some of us a consideration, this plan is a particularly convenient one; for by the second week of June all our bedding out in the flower-beds is over, and we are just then strong in our number of unused pots. And again when our young strawberry plants have been also removed from their pots and turned out into their new beds, these same pots come by the middle of August particularly welcome for our stock of flower cuttings. These little niceties of method and management save many shillings by the end of the year.

Mushroom and asparagus beds may also now be made up. Mushrooms can even be grown in a cellar. No better proof of the possibility of this is to be found than in the fact that all kinds of fungus very often make their appearance in the cellars by the end of the autumn. It is a little too early in the season to start some under our frames, for as yet our cucumbers are still going on, and our melons are, we hope, rapidly ripening. And these last, by the way, require attention and watchfulness just now in consequence. Melons that are beginning to ripen want, in some cases, gently lifting off the ground on to some piece of tile or small flower-pot placed upside-down. Be very careful while doing this not to break the arm of your plant.

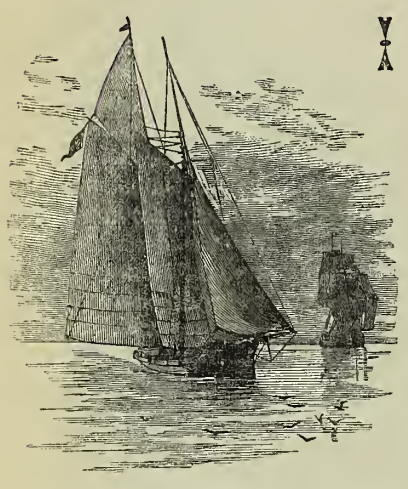
See, this month, to all the newly-budded fruit-trees; take care that they are properly secured and fastened, and be still particular in removing all suckers from the root and all portions of growth from the stock itself. Carelessness in this respect is the too common cause of failure; persevering attention, on the other hand, in a great measure is the secret of success. And then there are our vegetable crops. The potatoes and the celery want carefully earthing up, and the space between the potato-rows should be hoed and cleaned. Onions, too,



may be sown to draw when quite young. Our main crop of those, that by this time is ripe perhaps, should now be drawn. Leave the onions on the ground for awhile to harden and ripen. Sow a crop of turnips —an early kind is preferable. And then there is the winter spinach to be sown; this when it comes up should be thinned—some even advise planting it out. Cabbage seed, too, on good ground and in an open situation should now be got in. Indeed we may say this month that it is "seed-time and harvest." Let us hope that the latter will be prolific, for do we not know that when "the valleys stand thick with corn" there will probably be less "complaining in our streets"?

THE SEA AS A PHYSICIAN.

BY A FAMILY DOCTOR.



I SHOULD be loth indeed to waste even a line of my valuable space by way of preface to this paper, but it is perhaps as well that the reader should know it is the outcome of a by no means limited experience of sea-life, in all its varied phases. The intending traveller, whether invalid, convalescent, or simply pleasure-seeker, will find herein a few hints that he will do well to lay to mind, and take advantage of before embarking.

Now the first question one naturally puts to one's self, before making up his or her mind to try an ocean-voyage for the re-establishment of health, is a very natural and highly practical one: "Is it likely to do me any good?" This depends entirely, as a matter of course, upon what your symptoms and sufferings are and have been. The cases that are improved by a sea-voyage are far too numerous to individualise, but they are chiefly those of an atonic character. No physician would think of ordering a patient to sea, who was suffering from any acute or sub-acute disorder. In the earliest stages of consumption—in other words, in cases of threatened consumption—the long quiet sea-voyage round the Cape to Australia often acts as a charm. On his arrival in that country, supposing he has so timed it that this will be about the latter end of January, the balmy bracing ozoniferous air, the bright sky above, the constant sunshine, and the strangeness of everything around, will cause the patient to think he has got a new lease of life; nor, if he takes ordinary precautions, if he avoids all excess of every kind, and lives for a time by rule, will his thoughts have deceived him.

Cases of chronic gout and rheumatism are benefited by the air of the ocean, only great care must be taken in avoiding draughts; however pleasant and grateful they may feel at the time, there is danger in them.

Bronchitis, or rather *winter-cough*, is similarly benefited, but I have my doubts about *asthma*. Few seamen, however, if my memory serves me aright, suffer from this disease; on the other hand, many people who are subject to asthma find benefit by residing in a smoky town. Before, therefore, any asthmatical patient makes up his mind to go on a long voyage, I should advise him to reside for a short time at some bracing seaside watering-place; if he finds himself better by so doing, he may reasonably hope to derive advantage and improvement by taking a trip to sea.

In convalescence from tedious ailments of almost any kind, one's family physician would, as a rule, approve of a voyage to sea.

Cases of *dyspepsia* and slow digestion often receive marked benefit, and that too in a very short time, from a sea-voyage.

In addition to these special complaints, hundreds of others which may all be included under the general headings of *debility* and *nervous exhaustion*, are literally thrown to the winds during a voyage of even moderate length. In a word, wherever change of scene, bracing air, an equable temperature, balmy breezes, ozone-laden and impregnated with substances of an alterative and tonic nature, and perfect rest are needed to reinvigorate a constitution lowered or worn down—I do not say worn out—by over-work or worry, or by excess of any kind, a sea-voyage is just the thing to do the greatest of good.

Another consideration, which will obtain with many of my readers, is that of expense. I am happy to be able to say that in the very finest liners now-a-days, with the best possible accommodation, and an excellently-found table, you can live as cheaply as you can in a hotel at home. Take just one example, and I could give a dozen: a first-class return ticket between Liverpool or London and New York costs only thirty guineas; and this includes everything except wine; and I hope you don't need that—or imagine that you need it.

"There is the danger of a sea-voyage to be considered, as well as the expense, doctor," I fancy I hear some nervous lady saying. Admitting that we do hear of terrible things at times, of collisions and shipwrecks, and vessels going to sea and never being any more heard tell of, I believe I am right in saying that at sea danger to life is not greater than on land; and

ships, especially those that carry passengers, are so well built, so strong, and so well manned, that all risk of accident is reduced to a minimum. Having made up your mind at length to trust yourself for a time to the care of that wonderful physician, the sea, you will of course have to decide first upon the place to go to, and secondly on the class of ship that shall convey you thither. As to the choice of the place or country you ought to visit, much will depend upon the time at your command. If there is plenty of time on your hands, and nothing likely to occur to hurry you home, I should say by all means take a long voyage, say to the Cape of Good Hope, to the East Indies, or to Australia itself. Probably the latter is to be preferred by the ordinary invalid, going by way of the Cape and returning by the Pacific, crossing the American continent, and thence to Europe from New York. This is indeed a delightful "round," though for that matter there is no real occasion to make a round of it, for, having gone to Australia by the Cape, the patient — a patient he will hardly be by this time though—may return the same way.

As to the class of ship chosen for the voyage, the steamers that voyage between this country and the United States are, as a rule, exceedingly clean and comfortable. The P. and O. boats going by way of Suez to the East Indies are large, roomy, and at least as elegantly fitted as any of the Atlantic liners, so that if an invalid decided on visiting either of these lands, he would go by steamer. But if Australia be his destination, some one or other of the large sailing vessels is undoubtedly to be preferred, and this for many reasons. On the sailing ship you have more room, and consequently more comfort ; you have more cleanliness too. I do not mean to say that steamers are not kept as clean as they can be, but when the wind is blowing aft, or even in a calm, there is a constant shower of coal-grit from the funnel, which is very far indeed from being pleasant. Again, in a sailing ship you have more peace and quiet ; in a steamer, if your cabin is aft, the rattling of the screw under your head at night is a source of great annoyance, and if your cabin be amidships you are even worse off, for here is the everlasting thump, thump, and rattle, rattle of the engines, combined every now and then with the clang and noise of the men with buckets removing the ashes. There is, too, more heat in a steamer, to say nothing of the disagreeable odour of the engines. To these drawbacks you get used in time, but by going in a sailing vessel they are avoided entirely.

A wooden vessel is to be preferred to an iron ship the temperature of the between-decks therein being less easily affected by that of the external air. Composite ships, *i.e.* vessels composed of wood and iron, are also good. Many people prefer a flush-deck ship ; I think there is nothing so nice as a poop deck ; here your cabin will be placed, and you will be able to carry your port open in ordinary weather, and thus enjoy all the advantages of thorough ventilation.

Having chosen your ship, you must next secure your berth, which ought to be the best you can get ; a poop cabin, for example, if in a sailing ship ; and if you go early you will have a better choice. If going to Australia, it is unlikely there will be more than two berths in each cabin. If possible, take that one which is next to the port, and over rather than under another berth. You will thus have command of the port as it were; you will be port admiral, and secure plenty of light, and plenty of fresh air.

It will be necessary for me now to say a few words about the invalid's outfit. As to wearing apparel, then, you will require clothing for cold as well as hot weather, with under-clothing suitable for every variation of temperature. A pilot-jacket should not be forgotten, with warm gloves, mufflers, plaids or shawls, and easy head-coverings, not likely to be blown overboard by the first puff of wind. Rugs and shawls are very desirable vade-mecums. If you think of wearing linen under-clothing, take Punch's advice to people about to marry, and "don't." They get damp so soon and have to be changed every day, and it must be remembered that there is no laundress on board. Find out beforehand what accommodation for stowage you will be allowed in your cabin, and take therein only enough clothing or necessaries of any kind to last you until you can have access to your heavy baggage, which is always struck below; for many boxes in a cabin, and coats and dresses hung behind doors or against the bulk-heads, not only look extremely untidy, but they take up the room that would be far better occupied by fresh air.

Be careful to find out what fittings the cabins are allowed by the companies, and if water is supplied to the basins through pipes; if not, a broad-bottomed water-can should be procured. Whether the company supplies towels or not, have your own bath-towels and your own large sponge in a waterproof bag, to take to the bath-room with you every morning. A prettily ornamented cabin pocket for toilet requisites should hang at each end of the basin-stand; the looking-glass should be above, the larger it is the better ; and alongside this, and not far from your berth pillow, your swing reading-lamp should be fixed. Everything should be of small dimensions and neat and tidy in a cabin, which indeed should resemble a small boudoir afloat. You will want some small editions of your favourite authors, and a little bookshelf properly constructed for ship's use.

The bed in your cabin will be a narrow one, but not, I think, uncomfortable on this account, if only well found. See to this before you start. Do not forget to buy a lounge-chair for deck use. They are made of wood and fold up. A little pillow should be strapped on behind for the neck to rest upon, and the chair should have your name written distinctly and indelibly on the back. Have everything so arranged in your cabin that it is impossible for it to shift ; otherwise, if the ship begins to roll you will be in sad confusion. But do even more than this ; have everything so arranged in your boxes, as well, that there may be no shifting there. Sailors kick about the passengers' traps below in a marvellous fashion, so not only should the boxes be the strongest of the strong, but the contents should be so fixed that any amount of capsizing won't affect them. Take any

medicines with you that your doctor thinks you need, especially some nice cooling effervescents. Take also an apparatus for heating water with spirits of wine—be very careful how you use it—a jar or two of extract of meat, a few bottles of essence of coffee (a teaspoonful of this mixed in cold water makes a very refreshing drink), and a tin or two of well-baked Bath Oliver biscuits. If you care for it, eating-chocolate is very nourishing. Now you may ask me, why should you take these little articles if you sail in a well-found ship. I have the answer ready at hand. There will be occasions when you may desire a slight refection, in order to stem what I may call a hunger-wave, that is apt to come over one at all sorts of odd times when the berth-steward is not at hand. They are commonest just before you go to bed, but they may actually wake one up at night; and this hunger-wave, if not stemmed, will effectually banish sleep; and so forewarned is forearmed.

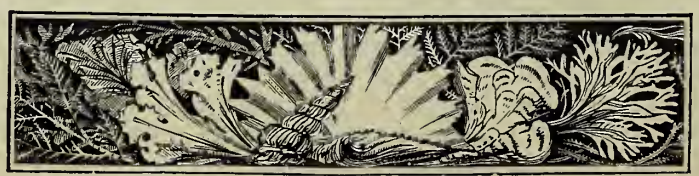
The best time for leaving this country should, if possible, be considered; your object should be to arrive and spend a few weeks at the port of your destination in the cool season; and summer and winter, as the reader no doubt knows, occur at diametrically opposite times in Southern and Northern hemispheres. At the Cape, for example, it is summer in January and winter in June. If you mean to visit either the Cape of Good Hope, then, or more distant Australia, you ought to leave this country in September. In the West Indies, on the other hand, the seasons are the same as with ourselves, and the best time for an invalid to cruise in that direction would be very late in autumn; and the same might be said with regard to a visit to the East Indies by way of Suez. The best time to leave this country on a visit to North America is the latter end of March; you will arrive in the States just when the most pleasant season of the year is commencing, and when the heat is not disagreeable. A run through the Southern and Western States is, in my opinion, such a pleasant way of reinvigorating one's health, that I wonder why the voyage out to and back from America is not more often had recourse to by invalids.

I must conclude with a few general hints for the invalid's guidance and comfort while at sea. If he has never been on a voyage before, he will very naturally dread the coming on of *sea-sickness*. An article has already appeared in this Magazine on this disagreeable complaint, and some very good advice was therein given. I will only say here, then, that sea-sickness is made too much of a bugbear of. Many people never get sick at all, others are sick only for a day or two at the most, and even in the worst cases it seldom lasts a week, and is very speedily forgotten for the simple reason that the patient generally feels all the better for his illness. It is better to keep quiet in the berth for the first day of the illness. However, keep the strength up with beef-tea and light, easily-digested nourishment; and get up on deck every morning if you possibly can, and keep all you can in the fresh air. Fight the illness boldly, and you will soon get over it, and by the time you are a day or two south of Biscay Bay, if you are going in that direction, you will begin to enjoy life at sea. It will be a dreamy sort of enjoyment at first, you will be inclined to lounge or loll on deck, with the balmy breath of ocean blowing in your face and a book in your hand, which you imagine you are reading, than to take any kind of exercise, unless it be to hurry down below when the pangs of hunger send you there.

Moderation in eating is absolutely necessary if you would reap the fullest amount of benefit from a sea-voyage, and stimulants are hardly required; indeed, they are much better avoided *in toto*. After awhile, the invalid must make a bold attempt to get rid of the inclination to sit about all day. He must take exercise. A short brisk walk on deck, say for a quarter of an hour before the second breakfast bell, is very beneficial. I will presume you have had your bath before now. It is a salt-water bath you have at sea, an enormous marble tub that you may go heels over head in if you choose. Be regular to a minute in going every morning to the bath-room; every one has a specified time, which is written against his name on a slate; do not stop above a quarter of an hour in the room, for others are doubtless waiting. Walking exercise is that most commonly taken, and although no landsman likes this deck-pacing at first, it comes to be quite enjoyable after a time. Try to have a pleasant companion with you in these rambles, and if you take an interest in the doings of the ship, her rates of sailing, the canvas she carries, the setting of the sails, the appearance of the sky, the clouds, and the sea itself, you will add very much to your enjoyment, and this means that you will be hastening the return of health. There are many kinds of amusement at sea—deck games, &c.—and these, I am glad to say, are nearly all of such a kind that even ladies can enter into the spirit of them.

Choose companions according to your taste—people very soon settle down into groups on board ship—but be kindly and pleasant with every one. Avoid arguments and heated discussions of all kinds, retire early to rest, and do not play cards.

Be on deck all you can; you must never forget that fresh air is half the battle, and you can only get it pure on deck. Carry your port open whenever possible, and in the tropics have your door open all night, with your curtain drawn of course, so that there may be a current of air through the cabin.



MAJOR GODFROY'S DISCOVERY.

By FRANK BARRETT, Author of "Hidden Gold," &c. &c.

CHAPTER THE SEVENTH.

THE MAJOR AND DORIS ARRIVE AT ANDELY.



EARLY in March, 1862, Major Godfroy, with Doris Drummond, alighted on the platform at Gaillon. The guard blew his horn, and the train which had brought them from Rouen went on its way to Paris.

"Are we going to live here, papa?" asked Doris. "Not very far from here, my child. See, there is the diligence that will take us on," answered the major.

"What a funny old omnibus!"

"Would you like to sit on the top or inside?"

"On the top, please. It looks so snug in there, and it will be fun to look down at the queer people in the road."

The sky was unclouded, and the sun made the air warm and soft, and gave a bright, promising, cheerful appearance to the landscape. The major lifted Doris into the coupé, and having seen his luggage properly packed, took his place beside her. Presently the driver got up, and smiling at Doris, spread his great sheep-skin coat with its pointed hood over her lap, and said a great deal that was incomprehensible to her. However, she smiled very sweetly, and said "Merci" in her childish treble voice. "Tell him he's very kind, and I am much obliged," she added to the major, having exhausted her resources in this strange vocabulary.

"One is always glad to serve pretty young ladies," answered the man, "and as for my coat, I am glad to be without it. It is quite warm to-day, like the real summer. So much the better. The dark days are gone, and the bright ones are come—Hihyere!" he called to his horses, cracking his long whip over their heads.

"The dark days are gone, and the bright ones are come," these words echoed in Major Godfroy's ears, and made him thoughtful. "I stand in the midwinter of adversity," he thought; "my day could not be darker, and the grim and drear horizon is unbroken by one hopeful sign of change." At that moment a little hand was slipped into his, and he found Doris looking up wistfully into his grave face. It was as though Providence had reproved him for overlooking the one consolation which it had left him, and not without effect. The major pressed the little hand, and gave himself to a participation of the child's happiness.

The driver continued to crack his whip over the horses, for they were not yet out of Gaillon, and he did not cease to encourage his three ragged animals to use their utmost speed until the Seine was crossed, and the last out-lying house had been left behind; then he put away his whip, hooked the reins on the handle of the brake, and lit his cigar. They had come to the flat alluvial tract which extends from the river to the chain of cliffs and rocky hills which border the great plain of the Vexin.

The hedgeless fields, with their varied colours of young green and purple-brown soil, were laid out on either hand like strips of carpet; by the road-side grew the apple-trees—leafless now, and all knotted and gnarled in trunk and limb. It was a great surprise and source of wonder to Doris to find the mistletoe growing in bunches among the black branches. They approached the chain of acclivitous hills with their chalk faces, all orange and pink in the light of the declining sun, broken here and there with openings to the lateral valleys which lay in dark shadow. It was mysterious and weird to the child. It must be perpetual Christmas, she thought, where the bunches of mistletoe grew; and pixies and elves must inhabit the dark valleys and the caves in the chalk.

"Shall we live in one of those dark cuttings?" she asked, pointing to the ravine which they were now approaching.

"I will ask the driver," said the major. "Where are the Andelys?"

"Right over there," replied the voiturier. "Do you see the great hill with the old castle on top?"

"Yes."

"That is Château Gaillard, and just underneath is Petit Andely. The château belonged to your English King Cœur de Lion."

The major pointed out the château to Doris, and told her what he knew about the old castle.

"It will be nice to live there, and—oh! look at that funny old lady with her tall white cap and her wooden shoes, and the basket on her back," exclaimed Doris, as they passed a bent old Norman woman. The major explained that this was the costume of the peasants.

"I have seen a picture of Santa Claus, and he had just such a basket on his back as that," said Doris. "Shall I wear wooden shoes?"

"Not unless you like, dear."

"It would be good fun, I think," the child said, her

big eyes opening wide as her imagination pictured herself sharing the romantic life they were entering.

The voiturier took up his whip, and, as he cracked it again and again, the horses once more strained at their rope harness, shaking their heads and making gay music with the bells upon their collars. They were entering a village. The poultry ran cackling out of the road as the diligence with its galloping horses came rattling and banging over the uneven stones; children came to the doors, and old women poked their heads out of the quaint dormer windows in the gabled roofs. In the middle of the village was an old church built on the slope of the hill. The eaves of the lichen-covered roof touched the hill-side at its further extremity, and one end of a farm-house was built in between the buttresses on one side. The roofs of the houses were covered with moss, and house-leek, and irises—they sloped at all kinds of angles, and not one was like another. It was all odd, picturesque, and unlike anything the child had seen before. She seemed to be entering the dominions of fancy and romance, and to be leaving behind her the every-day world.

They were again in the open road, skirting the hill-chain now. The voiturier had put his whip behind him, and his hands in his pockets, and he and the three shaggy brown horses seemed all to be enjoying a quiet doze. Up in the cliffs the rooks were fluttering about, apparently in noisy council over their nesting-places; on the lower slopes magpies gravely inspected the newly-turned earth—going in pairs and holding aloof from the noisy crowd of choughs. Then they got a good view of Petit Andely—its old houses all huddled together at the foot of Château Gaillard, like a brood of young chicks seeking protection under their mother, Doris thought, and standing right beside the beautiful silvery river, which, making a great curve from Gaillon, touched the hills here. The Seine was quite broad and broken up by numerous islands, whose fringe of tall aspens and poplars stood up in beautiful tracery against the yellow and orange sky. It all looked very beautiful, and still, and calm, and when the diligence stopped for a fat old gentleman to get out at a cross-road, they could hear the bell of the church, whose graceful spire rose from the midst of the houses, calling the good people to their evening prayers. They passed close under the grey ruins of the old castle, over which a couple of hawks were sweeping with slow majesty, and then the driver and horses woke up in good earnest, and dashed into Andely at a gallop, trying to make people believe that they had never dozed since they galloped out of it. All the houses were old, and many of them empty and falling into decay, for the cloth-makers, who had large factories in Andely once, deserted it to be nearer the railway, when that means of conveyance superseded the old river traffic. Across the Grande Rue, at intervals, chains were extended for the suspension of oil lamps on dark nights. A few women in their primitive Norman costume, and some children in white caps fitting close to their heads, were the only signs of life. It was indeed a villette of the past.

Over the cobble-stones the diligence jolted until it passed the church and reached the Chaîne d'Or hotel, which stands at the corner of the Place, and there it stopped.

"Voilà, Lemesle, voilà!" called the driver to the proprietor of the hotel, calling his attention to the passengers in the coupé. Visitors at this season of the year were few, and M. Lemesle was thrown into a state of high excitement by the novelty.

"Rest where you are, my dear monsieur," he called, "it is dangerous to descend from the top of a diligence without a ladder;" and with that he rushed into the courtyard of the hotel to get a ladder, screaming a hundred orders to his wife at the same time.

"Quick, quick, Heloïse, clear the saloon, light the stove. Despatch—quick—open the persiennes of the best room. Let Marie run to the baker's and bring the finest loaf there is. Beg our neighbour Madame Potel to fly to the butchery, and see if that leg of mutton is still to be had. Quick, quick!" and then he rushed out with the ladder, to find the major already alighted, with the little girl standing by his side.

"Can I have two rooms?" asked the major.

"You may have what you will, if it pleases you to accept my best," answered M. Lemesle, leading the way into the courtyard, and up the stairs on the outside of the house.

The windows were already thrown open, and Madame Lemesle came up with her arms full of white linen as the visitors entered the room.

"Our furniture is not fine," said she, "but in the country it is countryfied, as we say. Look at this linen, monsieur. One cannot find such white sheets in Paris, where they boil everything in soda, and never use wood-ashes and sweet iris-root. The smell of our Norman linen sends one to sleep, the visitors from Paris tell me."

"Oh, how beautiful!" cried Doris, who was standing by the window. The major went to her side and looked out. The hills stretched away towards Rouen in a great crescent—the wooded distance all in a deep blue shadow against the setting sun—a thin silvery streak marked where the river flowed by the foot of the chain. Looking in the opposite direction, they saw the plain over which they had come, with the grey ruins of the old château in the foreground, and the purple-brown heights beyond. Before them the Seine, only separated from the house by the width of the quay, spread out and wound among the islands. On one of these islands stood a farm-house; the outline of its gables could just be seen behind the lace-like screen of leafless boughs. The isle itself was in shadow; a woman in a boat with milk-cans was crossing towards it; a little child sat beside her, her tiny hands grasping the oar that the woman pulled. By the river-side some old women knelt, washing linen, which now and then they beat with wooden bats. The child in the boat laughed, and then the boat entering the shadow of the island was lost to sight.

Major Godfroy, holding Doris by the hand, looked

in silence, drinking in the peace and sweetness of the scene.

"We are well placed, is it not so, monsieur?" said M. Lemesle, coming to the window. "We have had English visitors who admire the place very much. One came in a boat so small that he could carry it; it was a mercy he was not washed away by the current. And another walked along the highest wall of the castle like a performer on the tight-rope; it was wonderful that he did not fall and break his neck. And there is a very high rock where Saint Jacques once lived in a cavern, but only the ravens build their nests there now. It is very dangerous to climb; so you see there are great advantages for an English visitor."

"The scenery is very charming," said the major.

"And may I be permitted to prepare dinner for you, monsieur?"

"Certainly. I will take the rooms for a week."

"Monsieur is very good; I will prepare dinner immediately;" and M. Lemesle ran away, leaving his wife to the less manly office of bringing up the major's luggage.

"I should like to live here always," said Doris.

"What does the little one say?" asked Madame Lemesle. The major translated Doris's wish.

"But that is not probable?" said madame, in a tone of inquiry, being not less inquisitive than her sex and her countrywomen.

"It is quite probable," said the major; "I suppose one could find a small house."

"There is one to let in the Grande Rue, with a garden running down to the river. It has a little salon, a dining-room, a little kitchen, two bed-rooms, and a grenier. All newly painted and prepared, and a perfect bonbonnière."

"I will look at it. Can I engage a girl to attend to my child?"

"Certainly; there are twenty girls who would be glad of such employment."

"Living is not expensive here, I should think?"

"Nothing is cheap now-a-days. Still the prices are not extravagant. The house I mentioned will be let for one hundred and eighty francs for the year; and you would pay your femme-de-ménage three sous the hour without food. She would go to market for you, and cook well, and keep the house proper. Then for a girl to wait upon the little one, ten sous a day would be very good pay."

"No, that is not extravagant," said the major, smiling.

"Bread and coffee and sugar are the same everywhere, but our butter is very good at twenty sous the pound, and good fowls should cost no more than thirty sous each."

"Then one might live here comfortably for a hundred pounds a year?"

"A hundred pounds! ma foi! for fifty, one should live like a prince."

Major Godfroy gave a sigh of satisfaction, for it behoved him to economise as he had never economised before.

CHAPTER THE EIGHTH.

THE MAJOR'S EFFORTS.

HOW to make twenty-five thousand pounds in twelve years—that was the problem Major Godfroy had set himself to solve. His honour was staked on the solution. Failure involved not only his own degradation—exposure to the world as a defaulter, and punishment by imprisonment in a common gaol, for anything that he knew to the contrary—but also the ruin of his friend's daughter—of little Doris—who called him father, and whom he loved as his own child. If the trust-money were not produced on her eighteenth birthday, the fact must be revealed to her that he, by culpable want of precaution, had lost the means of giving her a proper position in society, and must relinquish her to the misery of absolute poverty. Success would but enable him to refund the bare sum her father had left in his care, and he must still be a debtor, a claimant upon her forgiveness, but success was indispensable. "I *must* make the money," he said in desperation.

He had left England not before the last penny of the trust-money had gone to satisfy the ever-increasing calls of the company in which he had so unfortunately invested, and long after all hope had ceased of the Dolly Pentreith shares reviving. The few thousands he had saved in the past and obtained by the sale of his commission, were all he had in the world; and this money he would undoubtedly have sacrificed, as the price of his indiscretion, in payment of the company's legal claim upon him, but for his conviction that the whole affair was an iniquitous swindle, and that those at the head of it were liars and thieves. The man he had trusted so implicitly, and who had led him into the pit-fall, he regarded as a greater villain than Blake Standish, more unprincipled than Mr. Pitburn. He dared not trust himself to face Mr. Garton, and refused to see him on any consideration, fearing he might in his rage commit some act of violent retribution upon him. He returned, unread, all letters bearing the solicitor's signature, and would listen to no mediation. On the last day before leaving England, he had enclosed the fatal Dolly Pentreith shares in an envelope, and without a word of explanation returned them to the man who had made his own fortune and ruined another through them.

"Twenty-five thousand pounds—it is more than two thousand a year!" said the major to himself, as he walked in the avenue of limes surrounding the Place. "How shall I gain it?"

He had no special ability. His knowledge was limited to the requirements of a gentleman and a soldier. He had no remunerative resources outside his profession, and that offered no field for rapid emolument. What potentialities he might have had in his youth, seemed lost like the power of a limb by disuse. He was no longer young, at times he felt indeed as if all youthful energy and strength had for ever left him; and he could not hope in the limited time before him to achieve the proficiency in any profession which brings a man wealth,

study as he might. He had no great capital to invest, no knowledge of any branch of industry, no talent or gifts of eye or ear to make him artist or musician. He was, in fact, nothing but a poor gentleman. And yet by art, commerce, or science he must make good in twelve years the sum he had lost. And there was no time for delay; every day made the difficulty greater.

The richest man in the Andelys was M. Vigney, the sucrier. He was a stout, good-looking man, with an air of prosperity and content in his full face. The sucrerie stood beside the boulevard which joins Petit to Grand Andely, and Major Godfroy never passed it without looking up at the tall chimney, wishing it were his. He heard one day that M. Vigney desired more rest—he looked like one who could take a good deal of repose—and thought of finding a partner. Overcoming his habitual reserve, the major sought the rich man in his bureau. M. Vigney met him with cordial politeness.

"I have taken the liberty to call upon you, somewhat presumptously, I am afraid," said the major nervously, "hearing that you think of taking a partner into your business."

"It is the truth," answered M. Vigney, smiling; "I have more than enough of work; I do not wish to keep my nose always to the earth. I am not a miser."

"Your business is a lucrative one?"

"Like that"— M. Vigney shrugged his shoulders and extended his arms from the elbows—"It is not all sweet in a sucrerie, but I do not complain."

"You require a partner, perhaps, with a practical knowledge of the manufacture."

"No. I know enough for two. It is sufficient that the partner understands accounts—that he looks after little details in the leisure when I am absent, that he is not afraid of bad odours and dirt—and that he has some money."

The major asked himself if he could conscientiously undertake to say that he understood accounts; that he was not afraid of dirt and bad smells. The stench of decaying beet-root had offended his nostrils when he entered the precincts of the sucrerie, and his glove stuck to the back of his chair when he moved it to sit down. Noticing his air of grave consideration, M. Vigney said—

"You are not making inquiries on your own account, I presume, monsieur?"

"I do indeed think of going into commerce," answered the major nervously. M. Vigney looked at the spotless neatness of his visitor's dress, his perfectly-gloved hands, and refined features, with distrust, then with a shrug and a low deprecating voice, said—

"It is not a delicate business, monsieur. Even our bureau is unclean. And for a gentleman like you the bad odour——"

"One must overcome one's sensibilities where the occasion is pressing. I do not think dirt or even the unpleasant smells would deter me. I should like to know, however, before putting you to further trouble, what amount of capital you would require your partner to sink in the affair."

"Not a great amount. But the more you place, the greater would be your percentage of the profits—that goes without saying."

"Would you entertain the idea of accepting a partner with a hundred thousand francs?"

"That is a good sum. A partner with that amount would be very acceptable."

"And may I ask what the limit of profit upon that investment might be?" the major asked courageously, and braving the possibility of exciting ridicule, added—"Supposing one were to work the very utmost of one's power—overcoming one's repugnance, and resolutely forcing one's way onward, suffering nothing to come between him and success, toiling like a common workman if necessary, night and day when occasion requires—supposing your partner were a man of this kind, could he realise seven hundred thousand francs in twelve years?" He was too earnest for his suggestion to be treated lightly.

"No," M. Vigney replied emphatically, "no, monsieur. It is not in France that one can make fortunes so quickly as that."

"Thank you," said the major, rising from his chair with a sigh. "I am afraid my ideas of commerce are mistaken. I must seek some other source of profit."

He left the sucrerie, and walked home in dejection, not because he had built his hopes on being a sugar-maker, but because he could no longer expect to retrieve his fortune by commerce. If the most distasteful occupation could not retrieve him his fortune, it was scarcely to be hoped that more agreeable means might be successfully resorted to.

After this failure he kept his eyes upon the ground when he passed the factory with its tall chimney.

He fell into the habit of walking with his eyes upon the ground. At night, after Doris had said good night, he would walk slowly round the Place, his hands folded at his back, his eyes upon the ground. Sometimes when Doris was holding his hand, and they were walking together, he would forget her and drop his eyes in sombre thought. The men of the villette—especially after the revelation of his interview with M. Vigney was made general—regarded him as something more than an eccentric Englishman—he was a simpleton—a *pauvre bon homme;* the women were kinder in their judgment; they saw a man who had suffered and lost—a *pauvre homme bon.*

Soon after the first volume of Kinglake's Crimea was published, a note appeared in the Paris *Figaro* stating the price paid to the author, and the probable amount he would make when the work was finished. "Why should I not write a history of the Crimea?" thought the major, "I was among the first who landed, the last who quitted; and I took a part at the Alma, Inkerman, and the taking of the Malakhoff; why should I not write my experiences?" Then his heart glowed with the thought that he might pay a tribute to the memory of his dear friend Colonel Drummond. He determined to write the book, and after a week in Paris spent in collecting materials, he commenced the first page. "The Campaign of 1854—6. By Major William Godfroy," he wrote, and then paused to look at the words as a digger might feast his eyes upon the signs of gold

in his first washing. He felt it necessary to write in a lofty tone, using redundant epithets, and modelling his sentences in the correct style of Dr. Johnson. It was difficult work, however, to sustain the high pitch, and when on the third page he came to the name of Colonel Drummond, he fell into affectionate colloquial phraseology, which contrasted oddly enough with the foregoing stilted passages. But he did not see the inconsistency, for it was impossible for him to think of his old friend in the same way that he spirit of history to say any more upon him. Yet where was he to find subject for six years' writing in the mere taking of the Malakhoff if he progressed with such rapidity? He did not write hurriedly either, despite the urgency of his circumstances. It was a work which did not allow of careless haste. Every evening when Doris had gone to bed, he walked by the river whose silent flow was conducive to reflection, thinking out the subject of the next day's work. Frequently all the lights were out, and the inhabitants



"SHE SMILED VERY SWEETLY, AND SAID 'MERCI,' IN HER CHILDISH TREBLE VOICE" (*p.* 545).

thought of Raglan and Simpson, and other men who entered his theme. So he wrote on, well content and hopeful in his work. The only thing which excited his misgivings was the celerity with which he advanced. The work he calculated at beginning might engage his constant application for six or seven years, perhaps longer, and lo! when he had been writing only two months and had reached page 242, he had said all there was to say about Alma, Inkerman, and Balaklava, and his muse stood before Sebastopol. Quite a fourth of his history of the campaign was occupied with personal reminiscences of Colonel Drummond, and now, having described his death, he considered it would scarcely agree with the impartial of Andely slept, when he returned to the little house where he lived; yet when the thought of these long hours came to be expressed in words upon paper they diminished in a surprising manner. Try as he would, he could not make the taking of the Malakhoff extend beyond forty pages, and then there was nothing to do but to bring the book to a conclusion. It was discouraging to find that the history after all would not make more than one volume; but still he did not entirely despair of succeeding by literature. "I am not vain enough to suppose," thought he, "that I can make anything like the sum I expected to make by my work. I shall not ask much. I shall be quite content if I get a thousand pounds for the history—

which is not bad pay considering it is my first work, and has been dashed off in less than six months. I may expect more for the next. My experiences in India might follow quickly, before the stir made by the history subsides. 'Two Years in India' would be a good title; or 'Affairs in the Punjaub during the Years 1850—1' might be more appropriate for a companion history to this of the Crimea."

It is needless to dwell upon the major's failure to find a publisher for the book he had written. The manuscript came back from one firm after another, with a formal slip stating that "Messrs. —— regretted their inability to accept Major Godfroy's 'History of the Campaign, 1854—6,'" and the major's hopes faded, and faded, and faded, and at last ceased altogether to brighten his existence, when a publisher more outspoken if less considerate than the rest wrote in lead-pencil across the fly-leaf, "Worthless."

Thus a second outlet from his difficulty was closed to him, and he looked at those that remained with despair. Science, art, music—what could he expect from them? There was no department of science which he dared to approach. Years of study could not render him fit to compete with the crowd of quick, eager, young men. As for art, Doris ridiculed his attempts to draw a cat for her amusement, and excelled him in the representation. In music, he could not even hum the tunes he loved best.

Some men, feeling as keenly as he did the absolute necessity of success, and seeing nothing before them but failure, would have vented their feelings of desperation in paroxysms of anger, in some useless act of violence, as caged beasts beat themselves against the walls of their prison in impotent fury; but he never suffered despair to overcome his reason, and but for the increased gravity of his mien, the frequent intervals of abstraction when his grey eyes looked with dull despondency upon the road before him as into a vacant endless vista, he gave no outward sign of the emotion that agitated his mind. He never forgot that he was a man. The paper he had bought for literary work he folded carefully, and without a murmur put it away in a place where it would not meet his eyes.

Now that there was nothing to occupy his time during the day, he got together a few books, and devoted certain hours of the morning and afternoon to educating Doris. He was particularly patient and gentle with the child, and she being intelligent made rapid progress under his tuition. Between the hours of study and the long summer evenings after dinner, the major and Doris would go for long scrambles in the woods on the steep hills, and return with ferns and wild flowers in their arms; or paddle among the islands in the old boat which M. Emile, the marchand de tabac, was always glad to lend them. They found nests and green lizards and squirrels, and more than once came upon a boar in the deep woods. Their life seemed too quiet and harmonious for change. It seemed only part of this simplicity that when the major was alone he should walk slowly and thoughtfully, with downbent eyes, in the avenue round the Place; for no one knew the thoughts that seethed in his mind.

That something should come from this long-continued meditation was inevitable. It is impossible for a man to yearn continually for anything without some practical result; as well might one expect the clouds to gather without subsequent fall of gentle rain or blasting lightning.

As is not unusual, the idea for which the major had been looking so long came when he least expected it, and was of a kind altogether unlooked for.

CHAPTER THE NINTH.

DAWNING LIGHT.

IT was on an evening in August—the second since they had come to Andely—that the first germ of the discovery fell upon Major Godfroy's mind. Doris had left the boat to gather hare-bells on the islet, and the major sat in the boat with his hands resting idly on the oars, watching the long grass bend and wave before the current. A butterfly that had fallen into the water met his eyes; bringing his scull to the surface, he caught up the insect as it was passing. It still lived; the major took it carefully from the blade of the scull and set it upon the dry seat before him, and silently watched its recovery. He was struck with the enormous extent of the wings in comparison with the slender body, and wondered how such a seemingly flaccid organism could have the power to continually beat the air with four such wings. At this moment there was a couple of short sharp cries overhead, and Doris called out—

"Look, papa, look!"

It was a hawk slowly wheeling round and round, with scarcely a movement of its narrow curved wings. They watched: presently the hawk, closing its wings, shot downwards like a stone into the field beside the river, and a moment after rose in the air with a young rabbit in its claws.

"Oh, poor little bunnie!" cried Doris, covering her eyes with her hands.

But the major for once disregarded the child's distress; he was watching the flight of the hawk. A few quick beats of the wings raised it high in the air, and then, with steady yet slow movement, it swept rapidly away to its nest in the distant cliffs.

"It is strange," thought he, "that one creature with slight wings should be able to lift its own weight and a body still heavier—for the rabbit seemed larger than the hawk—swiftly and with seemingly slight exertion, whilst another with wings disproportionately large must struggle incessantly in its slow flight."

He scanned the horizon, and saw a couple of crows high above the old castle, making their way against the wind towards the west; he took out his watch and, timing the birds, found that they took less than two minutes to reach the wood at Tosny, which was full two kilomètres distant; and how slowly their wings moved! From the watch in his hand his eyes travelled to the ridge by the islet. An ephemeris was hovering there, its long wings moving so quickly as to

baffle measurement, yet its body seemed but a mere husk. The paradox was repeated.

Doris had forgotten her grief for the captured rabbit, and was singing as she arranged her bouquet: the major continued his observations. There were many birds near. In the side of a sandy island hard by some martins led their young, coming and going with incalculable swiftness. They shot across the water like arrows, yet their wings, like the hawks', were narrow and slight, and only at intervals they fluttered. Their quickest flight was when the wings were motionless.

"Why are you holding your watch in your hand all this time?" asked Doris, coming to the boat with the flowers in her hands.

"Weight has nothing to do with it," murmured the major, speaking to himself.

"I am ready, papa," said Doris quietly; for she was accustomed to the major's moods of abstraction, which generally inspired her with a feeling of awe.

"Ah! are you there?" he said, smiling.

Then he put away his watch and pushed off from the islet; but his thoughts were still with the birds. And he pulled slowly in silence, while Doris sat behind him as mute as he, and arranged her hare-bells and marguerites.

"Bon soir, Doris," called a little voice from the island they were passing.

"Bon soir, Lénore," answered Doris, waving her hand to the child who stood by the water's edge.

"Wouldn't you like to see your friend now, dear?" asked the major.

"Yes, papa; oh, yes. But you are too busy thinking, aren't you?" she said, looking into his face wistfully.

"There is plenty of time for papa to think," said the major laughing, not without a little bitterness, as he turned the boat and made for the steps where Lénore stood.

Lénore was the daughter of the widow Gaudry, who lived with her child on the island, and supported herself by the sale of milk and fruit. There was no "grand monde" in little Andely, and consequently no feeling of caste, therefore the major was as pleased as the widow that the two children should associate. Hitherto they had only met in Andely, whither Lénore accompanied her mother occasionally when she crossed to sell her milk and fruit; but Doris had a great desire to see the house on the island, which in the summer-time was perfectly hidden from sight by the thick hedge-growth and the boughs of the great walnut-trees. To her romantic fancy it must be the most delightful thing in the world to live on an island cut off from all the ordinary world by the swift-flowing river; it was like having a little world all to one's self, she thought.

Lénore took possession of her on the steps, and hurried her along to show all that was to be seen, talking rapidly all the time. Hearing voices, Madame Gaudry came from her garden and "bon-joured" monsieur, who had left the boat; and while Lénore chatted to Doris, she, with scarcely less volubility, talked to the major.

"It is all interesting and gay in the summer," said she, as the major paused to admire the beautiful view from the orchard, "but in the winter it is terribly triste, and I cannot tell you how I dread the time that is coming. Last year I had my husband with me, and we could sit over the fire in the long evenings and talk about our friends and our little Lénore; but he is gone, and I must sit alone by the fire and think of him. There will be no one to say, 'Ah, well! the spring is coming,' and cheer me up when I feel dull. I shall miss the light of his smile, and I shall not have warm stockings to knit for him; there is no need to patch up his old clothes and keep them neat and orderly. I am quite alone when my Lénore sleeps."

"Have you no friend who will come to live with you?"

"I have a sister at Rouen; but she does not like the country, and besides her business is too profitable to leave. She has begged me to go and live with her, and I would go if I could find one who would take the island off my hands. One says that monsieur wished once to occupy himself with a business; but I suppose monsieur would hardly care for such a business as mine. Yet it is profitable, and for one who could employ men to work the ground—which I cannot, being a widow and poor—great things might be done. It is true that there are but nine acres of ground in the island, but see what earth it is—ma foi! one cannot find such ground elsewhere. My husband used to say that it was sufficient for the earth to see grain to bear crops. And the fruit—look how the trees bear. If one did not support the boughs they would break under the weight, and the quality is so fine that they sell for thirty and fourty sous the bushel. A merchant has bought all that I have, to export to your country, to England, and the carriage alone will cost forty-five sous the bushel basket. And then for cows, see how rich this grass is, and how profuse. Monsieur finds the quality of his milk excellent doubtless—eh well, to sell milk like that is profitable, though one gets but four sous the litre for it."

"Is the rent expensive?" asked the major.

"Two hundred and fifty francs a year."

"Ten pounds," thought the major, "that is not a great deal."

"Of course the two boats and the dairy utensils are mine; but I would sell all for three hundred francs and be well satisfied. Is it that monsieur thinks of investing money in such a business?"

"I am afraid, as a business, it would not suit me," the major said, smiling.

"Perhaps monsieur would like to take the island for his pleasure, being rich. He would build a château perhaps—see, monsieur, how excellently placed the island is for such a purpose. In the highest floods it is always dry here, and many painters have come to make designs of the Château Gaillard from this point."

"It is beautifully placed, indeed." The major turning from the prospect regarded the vine-covered wall, which rose twelve feet high and had evidently at one time been still higher, for the top was irregular, and

in the collected dust of centuries upon its top grew sturdy bushes. "This wall is older than the house," said he.

"Oh, yes. It is as old as Château Gaillard itself. At the time that was built the king made a small castle here, and this wall formed the rampart, so my husband told me. One enters here." The major passed through the opening and found himself in an enclosure of nearly an acre in extent. The grey stone walls were covered with peaches and nectarine trees, the ground was planted with vegetables and fruit trees. The house, evidently built from stones of the old castle, was built into the wall.

"Papa, papa! oh, come here!" cried Doris.

"Ah! mademoiselle looks at the rabbits," said Madame Gaudry.

The major, turning his eyes, found Doris standing beside Lénore on a broad-stepped échelle some six or seven feet from the ground, looking into a deep cave cut in the thickness of the wall, and in which lived a colony of rabbits, who were now eating the carrots Lénore had carried up with her. The major stepped on to the ladder and peeped over Doris's shoulder. She was stroking the sleek ears of a great doe, who submitted willingly to her caresses for the sake of the sweet-scented carrot she held in her other hand. He looked at the child, whose eyes were animated with delight; as he put his arm about her to guard her from falling, she turned her face, and seeing his eyes full of gentle love, she kissed his cheek and said something in English.

"What is it that mademoiselle says?" asked Madame Gaudry.

"She says she wishes that we lived here."



"SHE WAS STROKING THE SLEEK EARS OF A GREAT DOE."

"That would be good for her health indeed. No one is ever ill on this island. Look at Lénore; she has never tasted medicine. It is very natural that one should be healthy where all things grow so well," said Madame Gaudry, still hopeful.

From the rabbits Doris was taken by her enthusiastic friend into the great cow-barn, to see the two calves, and thence to the loft above, where, climbing over the sweet hay, they could peep under the eaves where the pigeons built, and half a dozen nests were exposed to view.

"What pretty little eggs!" exclaimed Doris. Lénore stretched down her arms and brought up a couple, telling Doris to take them home with her.

"But the pigeons—won't they miss them?" Doris asked.

"Oh, they can lay as many as they please," explained Lénore. "But you must come and see the young ducks, and the little puppy—" and with that she led the way down, displaying the agility of a young kitten.

Meanwhile Madame Gaudry was still pointing out the more practical advantages of the island to the major, stooping aside occasionally to pluck a particularly fine peach or pear, or bunch of grapes, and add to the quantity she carried in her lap. The major did not check, or try to turn, the current of her talk; he didn't hear half of it, for his thoughts were wandering away to another subject. His wits were wool-gathering, as the saying goes. At such a time a man's eyes have a vacant far-away look that may be taken as a sign of intellectual weakness by those who do not know that a shallow aspect sometimes marks profoundest thought. Possibly Madame Gaudry made some such mistake, and thought that if she only talked long enough she might induce this weak-witted old Englishman to take the island; certainly her efforts did not relax until the major came to the steps and prepared to undo the head-line of the boat, when she turned to bid adieu to Doris.

"Here, little one," said she, "look, here is some fruit for your breakfast."

"But my apron is full already," said Doris, exposing the many gifts of Lénore. Madame Gaudry untied the string of her apron, and tying up the ends, put the bundle of fruit in the boat; then she embraced Lénore and helped her to take her seat.

"The thing cannot be impossible. Gunpowder—steam—electricity were secrets from man practically until recent times. Why should not a new discovery be made, and why should I not make it?" thought the major, still bending over the twisted chain.

"Monsieur will allow me to assist him—I am more used to boats," said Madame Gaudry.

"Thank you, thank you," he answered, bringing his thoughts to immediate circumstances.

"And I may hope that monsieur will consider the subject we have been speaking about?"

"About the island, madame—yes, yes. I will think it over at my leisure."

"A thousand thanks. I do not wish to hasten monsieur; but M. Lemesle has asked me about the property, and I shall be glad to know your decision."

"You shall know within a week," the major answered, stepping into the boat, without the slightest knowledge of what he was saying, for he had caught sight of a big beetle on a twig that had just thrown back the steely blue armour that covered his wings. As he ceased to speak the thin wings came forth, and the insect with a buzz flew away.

"Marvellous!" said the major aloud; then he took his seat and pushed off.

"The poor monsieur is mad," said Madame Gaudry to herself, "so much the worse for him; so much the better for me if he takes the island off my hands."

It was dark when Doris and the major reached home.

"You will come and say good night to me, papa?" said the child, before going up to her room.

"Yes, dear, in five minutes," he answered. Then he sat down and forgot all about her. For a couple of hours he sat in one position, his elbows on the arms of his chair, his chin in his hands, and his eyes on the starry sky. He needed no light to see the visions that came before his mind. Weird unearthly figures he saw, such as had never been before in the imagination of man—distinct creations of a brain awaking to intense activity—figures that were ever changing like Arabian genii as they failed to fulfil the purpose which had brought them into being—creatures partly mechanical, partly organic—things with monstrous limbs, and strange bodies, instinct with an unknown life, springing from a centre of whirling wheels.

At length he was recalled from this visionary world by a child's voice calling timidly from the head of the stairs, "Papa dear!"

He ran up-stairs quickly, to find a shadowy white-robed little figure standing there in the pale twilight of the summer night.

"My child, are you not in bed yet? It must be late—quite late," exclaimed the major.

"I have been waiting for you to come and kiss me—and—and I was frightened," answered Doris, as he lifted her gently in his arms and carried her to her bed."

"Frightened, darling! of what?"

"Don't know, dear," she said timidly, winding her arms about his neck. "You never forgot me before. And you looked so strange to-night, that I couldn't help crying when you didn't come to me."

"My child, have you been crying?"

"Not much, papa—just a little, quite quietly, you know, dear. And I tried to go to sleep and think of nothing but Ile Content and Lénore and her rabbits; but it was no use. And then I listened a long while and could hear nothing, and I said to myself, 'Perhaps papa has forgotten me for ever.'"

The major laid the child in her bed, kissing her for reply, for his tender heart was full, and he could not trust himself to speak.

"Papa cannot forget you," he murmured after a while. "And now, my Doris, good night. I will sit here beside you till you sleep."

When her fingers relaxed, and her breathing fell soft and regular upon the ear, the major rose, and descended the stairs noiselessly to the little salon below, with a happy confidence in the future which had come to him as he sat in prayerful silence beside the child he had undertaken to provide for.

He lit his lamp, took paper and pen, and essayed to reduce his visions to practical form. Daylight came, and overpowered the yellow light of the lamp, but still the major continued to cover page after page with strange diagrams and plans. Ignorant of mechanics, incapable of drawing, the things he represented on paper were scarcely less unreal and impracticable in appearance than the images which had entered his unfettered fancy; nevertheless they embodied the fundamental principle of Major Godfroy's discovery.

END OF CHAPTER THE NINTH.

A FEW PRACTICAL WORDS ON HOME TEACHING.



IN the present day, when education is making such rapid strides as to make it a task of no ordinary difficulty for even the professional teacher to keep up with her, it can hardly, I think, be expected that parents, immersed in business and trade cares as they for the most part are, should have that knowledge of the education of the day and its requirements which, in order to do full justice to their children, they ought to have.

It is with the hope of affording some information, likely to prove useful to such parents, that the following lines are penned.

Many persons are worried with the question as to what their sons and daughters, who are of such-and-such an age, ought to know, and what subjects they ought to be doing. They hear that Tom This and Alice That, who are not a bit older than their children, are doing subjects far in advance. They would therefore like to know whether their young people are above or below the average.

In answer to such difficulties, I would say that there is no hard and fast standard for any particular age; and even if there were, and granting that the child came up to that standard at the proper age, it would be quite impossible to say whether he or she would reach the next standard at the proper time. The child's mind may brighten and enlarge during that interval, and cause it to overshoot the mark, or it may, on the other hand, develop more slowly, and make the child fall far behind.

Nor is this much to be wondered at. Childhood is essentially the age of growth—growth both in body and mind; and it is only natural to assume that, just as we see children stop growing in bodily stature for a considerable time, and then suddenly make a start forward, and, to use a common expression, "grow too fast," so the mind or mental powers may very often behave in a similar way, and be at a standstill, or nearly so; and since, unlike the former case, we cannot actually see this mental stoppage with our eyes, we are apt to impute the non-improvement of the child's mental culture to idleness, inattention, and in fact to anything rather than the true cause.

This error must, of course, be carefully guarded against, and great care taken not to form a hasty and one-sided view of the case.

We very often hear complaints made by schoolmasters of the ignorance of children who have been home-taught, and these complaints are so general and widespread, that in all probability they are well-grounded, and we may accept it as a fact that a very large number of children taught at home are, notwithstanding the great care and diligence expended on them, not so well prepared for school as they might be. The reason of this, I take it, is not that the ability of the home teacher is so much at fault as that it is misdirected. The child is very often primed with a great amount of useless knowledge—useless I mean, to it, at its tender age—and this priming is, too often, the fault of the parents, who like to know that their little Arthur or Alice, as the case may be, is doing Grecian History, or Zoology, or something of that sort, when, in reality, he or she ought to be learning to write, to spell, or to read.

Early youth is the time for acquiring the greater part of that mechanical parrot-like knowledge which forms such a basis for future progress, and which is so very difficult to acquire when one is older. I refer to the thorough mastery of the multiplication table, the weights and measures, the dates of the chief events in history, and other things of a kindred nature. The mind when young is far more ready to receive and retain such things than it is when older. In fact, as the mind reaches maturity its power of remembering isolated facts such as dates, &c., diminishes. This will account for the difficulty many very clever people, whose mental powers are of the very highest calibre, have in remembering such things. To give an example which has lately come under my own observation:—A gentleman, who has achieved a very wide and well-deserved celebrity in connection with the science of astronomy, is entirely at fault when any questions of definite numbers—such as the sizes and distances of the planets—are propounded; but, on the other hand, displays the very greatest knowledge and acumen in following up and thoroughly grasping intricate theories and investigations. Numerous other instances might be given, and possibly many will occur to the reader, all tending to show how difficult it is for the ordinary mature mind to burden itself with independent and disconnected facts, and thus proving how advisable, therefore, it is that such facts should, as far as possible, be learned when the mind is young and fresh. And this point is more important in the present day, under the existing aspect of education, than it was formerly, inasmuch as the amount of knowledge a child is supposed to possess now at a certain age is much greater than it was then: thus making it all the more necessary, not only for the child to begin learning in good time, but to learn the right subjects by the right method.

One cannot help being struck with the remarkable way in which most of the ordinary school subjects have expanded during the last few years, and still will expand as long as fresh heads are brought to bear on them, and new books embodying fresh views published.

If we take, as an example, the subject Geography: I think most of my readers, who were educated, say, some twenty-five or thirty years ago, will agree with me that it then embraced at most only the topo-

graphical and commercial view of the world, with perhaps a little map-drawing. In the present day, Geology, Astronomy, Mathematics, Meteorology, Botany, and very likely some other sciences, are brought to bear on the subject, and it would be difficult to find any modern examination paper on Geography which did not contain some allusions to "doabs," "cyclones," "moraines," "water-sheds," "climatic variations," "heights of snow-line," "rain-fall," and hundreds of similar things, which were not mentioned or dreamed of in the ordinary school-books of twenty or thirty years ago. With Grammar, too, it is the same. To most of us the grammar we learnt at school consisted of a knowledge of parsing and the main rules of syntax, and if one were well up in these two branches he was considered a very fair grammarian, and quite *comme il faut*; but now-a-days one must know, in addition to these, the analysis of sentences, the history and derivation of peculiar words, the history of the English language and its connection with others, with perhaps Grimm's Law and a knowledge of Anglo-Saxon into the bargain.

I do not, of course, mention this widening of the area covered by these subjects as a cause for complaint, for it is, on the other hand, rather a fact to be proud of, and regarded as a sign of the increase of knowledge in the present day. I simply have drawn attention to it in order to impress upon any of my readers, who may be interested in home teaching, the importance of seeing that those young people with whom they have to deal should, in the first place, waste no time in learning things useless to them at their ages; in the second place, learn thoroughly all the mechanical and parrot-like acquisitions, such as tables and dates; and in the third place, learn carefully and well all that they do learn.

Before concluding, I have just a few words to say about a subject which, though not a school one, is still very important in its bearing on the happiness and welfare of a child in after-life, when it is sent away from home to school. I refer to the *early* inculcation of obedience. It is, I think, mistaken kindness to allow a child to constantly have its own way in opposition to its elders, to let it grow up wilful and disobedient, when we know that such habits, though comparatively easy to check in a very young child, require far more stringent remedies for their eradication as the child grows older, and therefore entail a correspondingly greater amount of severity.

There is one more difficulty, too, which besets the generality of parents—the choice of a school for their children. There are, of course, particular schools, situate in various parts of the country, which are peculiarly suitable, and offer special inducements to certain classes of parents.

The difficulty is, however, for parents to find out these schools, and to know whether they come under the category of those benefited. In solving this problem they will receive very substantial help from the perusal of "The Educational Year Book,"* which is filled with all sorts of information relating to our schools, colleges, and universities.

W. H. H., B.A.

CLEVELAND, PAST AND PRESENT.



WILBERFORCE spoke once of the change which the introduction of the iron manufacture into a district produced in it, and of that change there has been in this century no fuller proof than that furnished by Cleveland and the district to which this name is applied by the iron-masters. Before the utilisation of the vast iron deposits of the north-east of Yorkshire, the district of Cleveland was one of the least known in the country; it was unpierced by railways; there were no great industries carried on in it; its population was sparse, and its agricultural products limited in proportion to its great extent. There were parts of it which were known for their beauty, or made memorable by association; but the inner portion was isolated, and long rolling moors and high hills, interspersed with fair little valleys, occupied no small portion of its space. The valley of the little river Esk had been long one of the haunts of artists, and its pleasant woods like Mulgrave, waterfalls such as Thomasin "foss," the bold bluffs that shut off the purple and green of the moors from the well-cultivated little dales, as well as the one or two castles or mansions in the district, had formed the subject of many a sketch; whilst the picturesqueness of Whitby, with its grand old abbey placed high above the narrow streets of the old town, the little harbour, and the white timbers of the vessels building, "spectral in the moon's pale light," had formed the suggestive points of many a painting. Far to the north-east, near the little straggling village of Old Saltburn, was the mansion known now as the Old Hall at Marske—the tall trees framing which, the dim grey stones, and the antique windows and massive doors tell of the troublous times before the Civil War, when it was built. South from this was the hall where Sterne visited, and from which the great family of De Brus sprang, to give kings, bishops, baronets, queens, princesses, duchesses, and dignitaries innumerable.

Not far away was the pleasant town of Guisborough

* London: Cassell, Petter, Galpin & Co.

with the noble ruins of its Gothic priory, whilst nearer the sea, the ancient castle of Kilton was dismantled, and moss-grown walls and fosses alone define the site of a structure once deemed impregnable. There were, in addition to these mementoes of the past glory of Cleveland, a few towns such as Lofthouse, where the industries of the past were decaying; a few villages scattered along the bases of the hills, and hamlets and farmsteads solitary, with fishing villages like quaint old Runswick or Staithes. It had scenery diversified by hill, dale, and rolling moor; its inhabitants were a hale, frugal people, addicted to old-world customs, and life passed in it with little change from year to year. Indeed, though fifty years ago railways entered it, and a small port was placed at its northern extremity, it is within the last thirty years that there has been produced the change which Wilberforce speaks of—a change attributable to the great industry he had known aforetime effecting such a change.

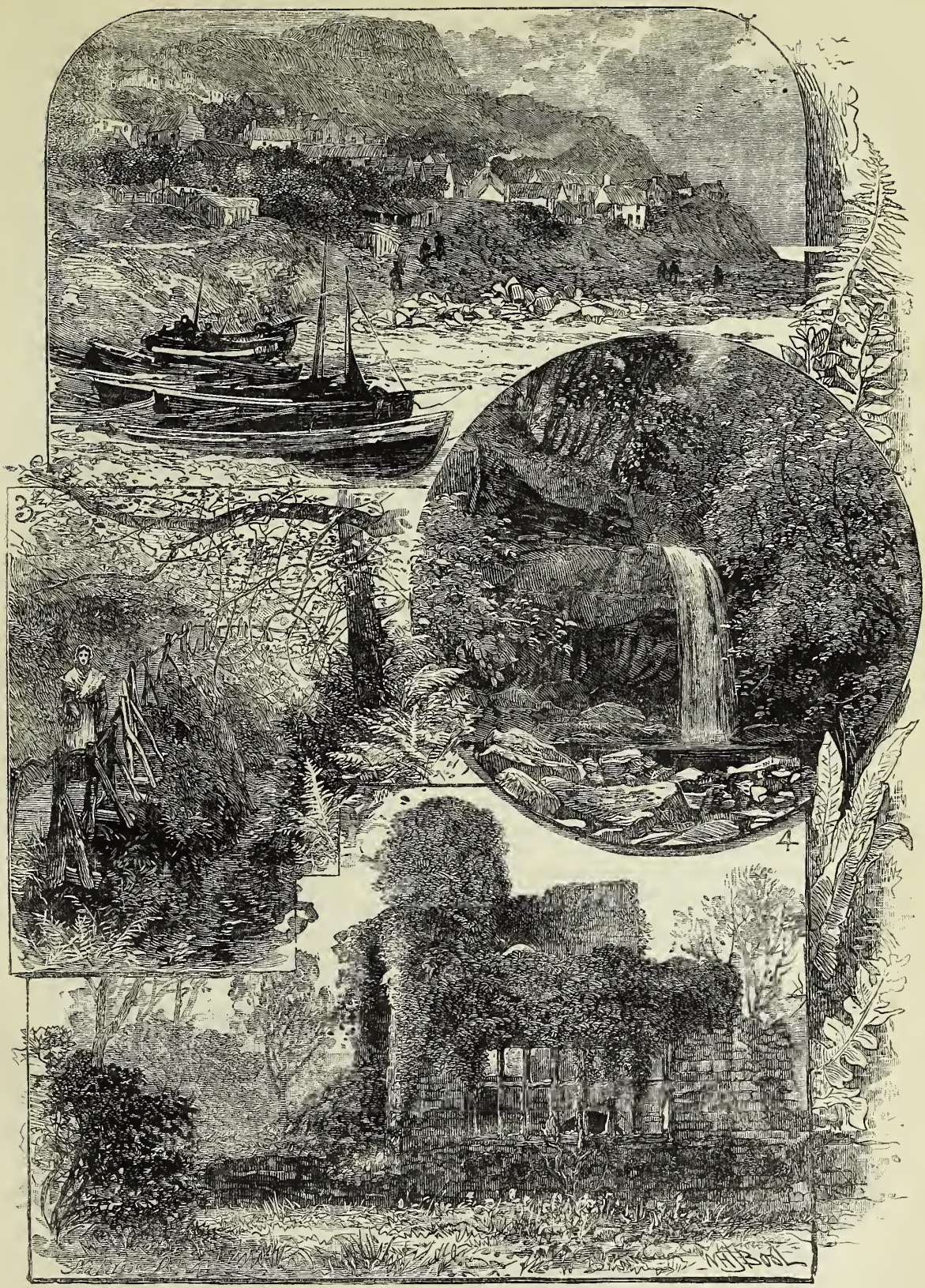
At the present time there are large sections of Cleveland which may be described as honeycombed in the search for iron ore. And it is this that gives the duality of appearance to the iron-mining district. Above ground, there are to be seen the mining villages, the machinery, tipping cradles, ventilating machines or chimneys, long lines of railway trucks and sidings, and repairing shops of joiners and smiths, and the frequent puffs of the engines mark the courses of the railways. But down below there are busier scenes. Tunnelled into the hill, or sunk into the plain, are great galleries or shafts, many fathoms long or deep. From these diverge other galleries; and again from these, working-places where the miners are blasting, hacking, drilling, and bringing out the ironstone from its thick seams. In these mines, or about them on the surface, work 8,000 men. The work is laborious, but on an average the accidents are fewer and the loss of life much less than in coal-mining.

In each of the "boards," or working-places, two miners work. Into the face of the ironstone, which is in seams many feet thick, the workmen drill a triangular hole with an iron rod, and this hole is filled partly with gunpowder, to which a fusee is attached, and by the explosion of this the stone is loosened. If needed the masses are further broken, and then loaded into the small mine-tubs to be sent to the mouth of the mine, where it is "tipped" by the "cradle" into the railway waggons. As the working proceeds wooden props are inserted to support the roof; and when the working-places are wrought into one another, the intervening pillars of stone are also worked out, and that portion of the roof is allowed to sink in. The men are paid by the ton, and the rate of pay rises or falls, by an automatic sliding scale, with the price of the pig-iron which is smelted from the ironstone. In this mining part of the district there is little visible of the vast work that is progressing; and only an occasional ventilating shaft, the long trains of waggons, and the stereotyped mining villages give indications of the human bees below, of the miles of mine-passages, and the cities of squares and streets that are being cut down in the deep dark mine.

Following the track of the trains of ironstone, we come into the region where they meet the other raw materials that are used in the production of pig-iron. Leaving out of the question that part of the iron produced in the great district of the North from iron ores brought into the district, it may be said that annually about 2,000,000 tons of pig-iron are made from the native ores. Over 6,000,000 tons of ironstone, the great bulk of production of the district we have left, are taken to produce this iron. And, roughly speaking, about 4,000,000 tons of coal are used to smelt it, whilst there are needed about 1,000,000 tons of limestone to be used as a flux in the operation. Before the first two materials are fit for the blast furnace, the ironstone is calcined—roasted—in kilns, and the coal is converted into coke in the beehive-shaped ovens that are so familiar a sight to the traveller on the railways in the interior of South Durham. On and near Tees-side, there are erected over eight-score blast furnaces, huge and costly erections, towering up from seventy to over one hundred feet in height, and in the words of Hood—

> "——casting upwards, day and night,
> Flames of red, and yellow, and white."

To over one hundred of these great smelting furnaces, the ore, coke, and limestone are conveyed, and in proportions such as those indicated, they are raised to the head of the furnace, and there poured into an interior heated more than the "seven times heated" furnace of old. In these great furnaces, as the materials descend, they acquire first a dull red, then full red, and then at the point of fusion a very bright red; finally, close to the point where the furnace is tapped, a white heat is reached, and at length the glowing liquid issues into the sandy furrows that are made to receive it at the base of the furnace. This, cooled in its sandy bed, is the pig-iron that is afterwards "puddled" in the puddling furnaces, and made malleable, or conveyed to the Bessemer converter to be quickly transformed into steel. Its production and manipulation is the great industry of the land of Cleveland, which realises the description of old, a "good land a land whose stones are iron." In its production and manipulation an army of 20,000 workers find employment, in addition to the coal-miners and limestone quarrymen of Durham; and in the provision for that army, and in the transit of their production, there is the cause of the vast change in the population of the once secluded district of Cleveland, and in their operations a physical change that presents itself in striking guise to the traveller in the North. In the smelting districts there is a scene worthy the painting of a Turner. It is a strange scene by day, a weird one by night. By the sides of the railways that traverse it, and on or near the banks of the river Tees, there are scattered these tall smelting furnaces, little varied in shape, rising like tall dark columns, at times with the interspersed guides up which the "lift" for the raw materials is moving; with spiral staircases wound round, or with a brattice between each couple of furnaces, strongly like that up which a coal-pit cage swiftly slides. From the mouth of the



CLEVELAND, PAST AND PRESENT.

1. RUNSWICK. 2. THOMASIN "FOSS." 3. IN MULGRAVE WOODS. 4. MULGRAVE CASTLE.

(*From Photographs by Mr.* W. STONEHOUSE, *of Whitby.*)

furnaces there intermittently rise clouds of smoke, varied at times with tongues of flame, whilst from the base "slag" runs in a glassy stream, or a sparkling flow of white-hot metal runs through the furrows of the yellow sand, irradiating and colouring it as it slowly acquires solidity in the grooves that have been cut for it, and darkening as it cools through all the shades from a reddish-white to a dull grey. Here and there amongst these smelting furnaces and amongst the stout-built engine-houses, that are filled with a hissing of steam and a rumbling of machinery, are some of the rolling mills and forges. In the long low sheds, with the stacks from puddling furnaces rising thence, are the makers of malleable iron. Here is one of these puddling furnaces, charged with iron and watched by its attendant puddler, armed with his rabble or paddle, with which the molten metal inside is at the proper period brought into a mass that may be seized, drawn forth, and conveyed, dripping fiery drops as it is taken, to one of the sounding steam-hammers, where the white ball is pounded and beaten, shedding showers of sparks, and recalling that passage of the poet—

"A hailing fount of fire is struck by every squashing blow;
The leathern mail rebounds the hail; the rattling cinders strew
The ground around; at every bound the sweltering fountains flow."

The furnaces, dull without, but seen through the orifices to be glowing within, the stacks of chimneys vomiting streaks of smoke, or with flames leaping up to the "damper," the glowing balls of molten metal hurried hither and thither, and the trailing serpents that writhe, red-hot, between the rolls where the iron is shaped into bar, angle, or rail—these form a picture that in the day time is rather startling, when it is accompanied by the shrill whistles of locomotives, the creaking of waggons, and the continued "bass" of the steam-hammer, and illuminated by the glow that spreads around from many a fire.

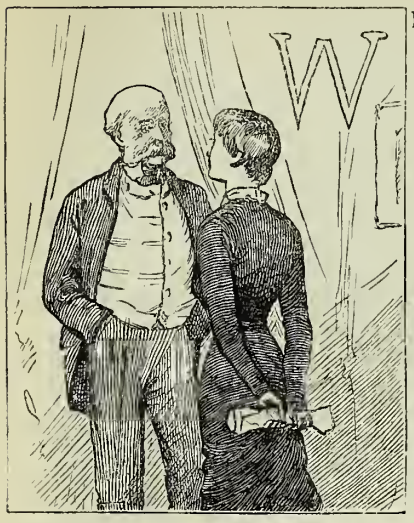
But it is at night that the scene becomes spectacular. On earth below a thousand fires light up the scene, and are reflected in the skies above. The sky along Tees-side for miles is lit up with lurid gleams that fade and rise as the flames they reflect fall or bound upwards from furnace-throats. Along the route where iron is made or manufactured, these sky reflections are lurid red; but when the scene of the conversion of iron into steel is reached, they change to a silvery white, flickerless, but are periodic in intensity. And below expanding in this new Black Country a weird scene is visible, and that for miles by river or rail. The railway traveller is hurried through a route which is on either side hemmed in with waggons of coal, coke, ironstone, and limestone, impinged on by stacks of pig-iron, and close to which ever and anon furnaces and works protrude their dark heads, with tongues of flame or smoky haloes issuing thence, whilst at the bases there are glows from the molten metal that throw into relief the figures of the attendants. It is a scene such as that described by Dante, when he speaks of the fierce light that "through prevailing darkness" shone. Through the interstices between black waggons and great piles of iron, the ruddy works are seen; pencils of fierce light striking across from the orifices in the doors of puddling furnaces, through even the stacks of their chimneys, and darting upwards through the half-closed "damper," over which they form a fiery crown. From the taller tops of the blast furnaces, tongues of flame leap alternately with clouds of light smoke; and when the converters of the steel works are seen sending forth out of the craters of these egg-shaped volcanoes, a shower of flame and sparks that leap uninterruptedly upwards, giving kaleidoscopic effects in colour, whilst throwing into relief the whole of its neighbourhood, some idea of the route by night is seen, though the deeper darkness beyond, with its mysterious star-lights, is not appreciated. In the denseness of the north is the land where salt is being sought, and in that to the south, where occasional jets show the presence of mine or furnace, is the mining land left behind. These operations—the mining, smelting, and manufacturing of iron—have changed this once-isolated part of the northern land. They have given it industries the commercial value of which can scarcely be tabulated. Yearly, the iron that is sent out of the district in its crude state is worth £1,250,000, and that retained is, when further manufactured, worth £4,000,000; whilst the value of the steel produced reaches more than £1,250,000 additional; so that in the production and manipulation of it, so far as the crude iron, or the metal in a state fit for ship or railway construction is concerned, there is a yearly value of from six to seven millions sterling. But there is more than this: there are employed in that production and manipulation in mine, furnace, forge, and foundry, over 25,000 persons, and it is in these, and in the allied and dependent trades of ship-building and of transit, that the great bulk of the producing labour is employed, apart from that of the tributary workers.

In the sights that the American Quaker poet has pictured in the lines—

"The forges blow, the hammers all are ringing,
Beneath its smoky veil
Hard by, the city of his love is swinging
Its clamorous iron flail"—

in these sights and scenes, in the iron ribs of the vessels that slowly take shape, in the chemical works that breathe out clouds of stife, there are signs of the growth of what is inadequately called the Cleveland District in the past two-score years. It has come out into the fierce light of prosperity; its agricultural lands are seamed now with the mounds of slag, its rivers and harbours are belted with factories; in its once-quiet valleys the rush of the locomotive is heard, and the pleasant rural land is now dotted with the palaces of the iron-masters. Its chief town has adopted the motto of "Erimus," and that is the one that may be applied to it as a district. Its commerce "sweeps onward," and there are variations as great and as rapid in its industries, and in the fortunes of some of those who have been its foremost men, as in that humanity that Lowell's strong verse has told us of. So far its growth has been American in rapidity, but it hopes that in the future it may be British in stability.

OUR HARMONY CLASS, AND HOW IT DEVELOPED A MUSICAL GENIUS.



WHEN Mr. Gilman first came to be organist at Ashdale Church, and the report very quickly spread that his talents as a musician were of an order hitherto scarcely conceived of as possible by the inhabitants of that benighted town, no one rejoiced more heartily than I did. I had come home from Germany a year or so before, anxious above all things to find means of carrying on the study of music, to which, under an enthusiastic German master, I had devoted the best part of my time abroad. But soon I had fallen into the depths of despondency over the absence, in the neighbourhood of my home, of every condition necessary to the development of musical taste. Never was a place more destitute of interest in music than Ashdale; and the villages round about—among them, Shallerton, where my father was rector—shared the same reproach. How, in the face of so adverse and discouraging a state of things, could I hope to bring to maturity the seeds of genius which I so fondly believed to lie latent in me? How could I fulfil my promise to Herr Karl, of making music in all its branches the principal study of my life? The thing was obviously impossible, and at length I had resigned myself to my fate, plodding on in lonely industry at the piano and waiting for brighter days to dawn.

In Mr. Gilman's arrival I saw the inauguration of the dawn I longed for. Surely it would be possible to turn his presence in Ashdale to good account. When old Mr. Harding—a great friend of mine, because he was one of the few people in Shallerton who cared to hear me play—came and repeated to me all the good he had heard of the new organist, I listened eagerly, and with a keen feeling that here was indeed an opportunity not to be lost.

"I think, my dear," suggested Mr. Harding presently, "that you should go and play to Mr. Gilman, just to show him, you know, that we have *somebody* musical among us."

"I want to learn, not to perform," I replied meditating; "I wonder whether he would give harmony lessons, and what they would cost."

"He would be sure to give them; organists always know all about that sort of thing," said Mr. Harding rather vaguely.

"Yes, but lessons are so expensive," I said slowly, remembering my father's narrow income; "I don't see how——" I paused, then added, suddenly inspired, "We must start a harmony class! I will get some ten or twelve people to join, and the individual expense would be trifling."

"Ten or twelve people! Now, my dear child, who are the ten or twelve people you propose to yourself as members of a harmony class in Shallerton?"

I was put to it for a moment, then began hopefully—

"Well, you and I, Mr. Harding, that's two——"

"I, at the age of sixty-four!" he exclaimed.

"Certainly," I said persuasively; "you know we are never too old to learn. And then there is Miss Woods, she used to play the harp once upon a time; and there is Miss Sharpe—I remember she told me once she used to study harmony in the days when she was young, and so she may as well do so again—and then of course there is Job Christie."

Mr. Harding laughed at me.

"You will have a pretty mixture by the time you have done," he said.

"I can't help that," I answered stoutly. "When one's choice is so limited, it would be absurd to be particular."

Job Christie was a protégé of mine, a boy whom I had taught a little, and of whom I was destined to learn a great deal. My interest in him had been first awakened in the following manner. Passing the church one morning, my attention was attracted by the sound of some one playing the harmonium—a jarring old instrument, usually never touched by any one but myself. Naturally I looked in to see who it was, and discovered a boy of about fourteen, who was sitting there fumbling about the keys, and picking out chords and tunes with an evident ear to their correctness, and appreciation of their harmoniousness or the reverse. I listened for some minutes without giving any sign of my presence, and after awhile the boy played straight through a hymn-tune which he had apparently picked out to his satisfaction before. I went up to him now, and found that it was Job Christie, the son of a well-to-do farmer in Shallerton, and a former Sunday-school boy of mine.

"Job," I said, touching him on the shoulder, "when did you learn to play the harmonium?" He looked round and slipped off the stool shamefacedly.

"I only comes in sometimes, Teacher, and sees if I can't find a toon on it."

"Didn't anybody ever show you the notes?" I asked.

"Naw, Teacher; it's easy to hear which be right."

Here was a boy! I made him play the hymn-tune over again, this time taking the book in my hand and comparing it note for note with his performance. To my surprise he had picked out not only the tune, but the bass and inner parts, with almost perfect accuracy.

"Job," I said when he had finished, "would you like me to teach you about the notes, so that you can read printed music?"

"Will yer, Teacher?" said Job eagerly, "will yer learn me to know them little dots and lines in the hymn-book?"

"I should like to," I assured him; "if you will come to the Rectory sometimes, I will show you things that will help you very much."

Job's delight shone out of his eyes, and from that



"WOULD YOU LIKE ME TO TEACH YOU?"

day he had regular lessons from me. The notation bothered him a good deal at first, but that difficulty once overcome, his progress was rapid. His natural aptitude and in-born feeling for music gave me my first glimpse into the nature of genius as opposed to mere talent and industry, and lessened the comfort I was wont to draw from Carlyle's theory, that genius is merely a capacity for taking trouble. Nevertheless I had as yet no idea of Job's being my superior as a musician. My own powers of execution were so much greater—for he was a good deal thwarted by the unpractised clumsiness of his hands—and my knowledge of music was so much wider, that he still seemed a beginner compared to myself. My fall was yet to come.

To return to the question of the harmony class: I was not to be disconcerted by Mr. Harding's ridicule, and went about the execution of my scheme in a most sanguine spirit. My first step was to enter into correspondence with Mr. Gilman, from whom I received a letter giving me the information I needed about his terms. He expressed himself willing to come over to Shallerton and deliver a lecture on harmony once a week or fortnight, at the charge of six guineas for the course of a dozen lectures. He should suggest twelve members as a convenient number for the class. "I have been disappointed hitherto," he concluded by saying, "at finding so little musical feeling in and about Ashdale; but perhaps, if I can make these classes pleasant, it may be the first step towards awakening more general interest."

I don't think there was a soul in our scattered parish, who had ever so much as sung the hymns in church, that I did not appeal to on behalf of the harmony class. Disappointed again and again, I returned to the charge with unabated zeal, and did at length succeed in getting together the requisite number. On the day fixed for the first lecture we mustered in Mr. Harding's drawing-room, and an odd assemblage it was in all conscience. I could not help thinking the look of amused surprise, which crossed Mr. Gilman's face as he entered and glanced round at us, very natural and comprehensible. There was dear old Mr. Harding himself, with his white hair and sedate expectant expression; next to him sat the lady harpist, of about the same age, whom I had persuaded into believing that on her support depended the welfare of my scheme; then came Mrs. Rawlinson, a busy materfamilias, who had hardly touched the piano since her marriage, but who was nevertheless one of the most musical among us; then a severe single lady who, having learnt something of harmony once before, was anxious to take this opportunity of evincing her superiority to the rest of the world; then my shockheaded, uncouth pupil, with his great eyes full of blissful anticipation; then my father's curate, whom I had skilfully enticed into joining; these, with a contingent of a few girls from a large school in Shallerton, their pale little music-mistress, one of my sisters, and myself made up our number.

As Mr. Gilman began his lecture, a slight nervousness was perceptible in his manner, which, as he explained to me later on, was caused by his difficulty in knowing where to start, or how much to take for granted as already known to us. Not unnaturally he assumed at first that the class knew a great deal more than as a whole it did; then, perceiving by the blank expression of several faces that he was talking so much Greek to his audience, he went to the other extreme, and after giving a rapid sketch of the wide area embraced by the study of harmony, proceeded to devote the greater part of the lecture to the definition and explanation of clefs, time signatures, and rests. This was much better; it put his listeners into an excellent temper to find themselves understanding him so readily, and I overheard Mr. Harding and his contemporary giving vent to contented little murmurs of "Yes, yes, to be sure—that is quite clear—I comprehend per-



"THE CROOKED, SMUDGY NOTES WERE INVARIABLY CORRECT" (*p.* 562).

fectly—most interesting—certainly—I see exactly what you mean"—and so on. Miss Sharpe leant back and looked round with an indifferent air, as though such trivialities were unworthy of her attention. Job's eyes and limbs were dancing with impatience to get on, while I personally was glad that the first lecture should be too simple to puzzle or alarm the weaker members, whom I had with so much difficulty cajoled into joining the class. At the end of the hour Mr. Gilman requested us to supply ourselves with copies of a small manual he had brought with him, and to prepare the first exercises in it for him.

I only wish the general satisfaction expressed after Mr. Gilman's departure that day could have lasted throughout the course. But as time went on and lecture after lecture increased in difficulty, as in doing the exercises there were more and more rules to be remembered, and fewer and fewer notes all ready supplied in the book, as passages to be analysed grew harder, and chords more unmanageable, symptoms of discontent and disaffection began to manifest themselves, and soon I was assailed by complaints on all sides. As the chief promoter of the class I was considered the right person to appeal to on all matters connected with it, and I would have defied the most accomplished Trimmer, or Æsop's old man himself, to please everybody, in my position. Mr. Harding declared it was absurd to hurry on so; the Genius, as we nick-named Job Christie, fidgeted at being kept so long over one chapter in the manual; the old lady harpist gave up attempting to do the exercises, and brought with her to the lectures elaborate pieces of fancy work, which absorbed the greater part of her attention; while Miss Sharpe, who had expected to find herself well ahead of her companions, but had actually forgotten all she ever knew, resented Mr. Gilman's many corrections of her exercises, and emphatically protested against what she called his captiousness. "He pokes his nose into my MS. book and hunts down every little slip of the pen as if it were a mistake," she said to me indignantly, one day.

"It is difficult to help that happening occasionally," I said soothingly; "and, of course, it is not to be expected that we should do the exercises without any mistakes—unless, indeed," I added laughing, "we invested in a key, to be sent from house to house."

"Is such a thing published?" inquired Miss Sharpe.

"I noticed the advertisement of it at the end of the manual," I answered carelessly. After this Miss Sharpe's mistakes were conspicuous by their absence. But I make no inferences.

At the end of the first course of lectures four or five members retired, amongst them Miss Woods, with a gentle confession of her utter inability to understand a word Mr. Gilman said, and Miss Sharpe in high dudgeon at seeing that he was suspicious on the score of her latterly correct exercises. However, we were reinforced by some Ashdale people who had expressed a wish to join us, and a second set of lectures was organised.

Hitherto I had not learnt much that was new to me, but Mr. Gilman now proposed that part of the hour should be devoted to the study of counterpoint, and here my troubles began. At first, remembering Herr Karl's dictum "that no one was worthy to be called a musician who could not write counterpoint," I rejoiced to think that I was qualifying myself for that proud title; but soon, alas! I was groaning under the new infliction with the rest of the class. I dreamt wild dreams of *canti fermi* and endless counterpoint of the second species in two parts, and the first species in three parts. I wondered with a shudder what I should do when it came to the fifth species in four parts. I figured to myself with awe the amount of knowledge requisite to the composition of a fugue.

Mr. Gilman was mildly perplexed. What was the difficulty of bearing in mind these simple rules? We shrugged our shoulders; the rules didn't seem simple to us, or rather their number overwhelmed us. Exercises had to be worked out like a mathematical problem,



"YOU WON'T EVEN LEND HIM THE MONEY?" (*p.* 563).

and continually one found oneself unable to proceed because there was not a note one could use without breaking some rule or prohibition. The easiest plan was to try the exercise first on the piano, but that was put a stop to by Mr. Gilman, who begged us never to play over our counterpoint—at any rate, not before writing it.

It was terribly disheartening. Why did I, who so longed to be a real musician, find the work required of me so hard and dry, and incomprehensible; while to Job Christie (and herein lay my bitterest mortification) it came almost as easily as to Mr. Gilman himself? The boy hardly seemed to need the guidance of the rules, so quick was his intuitive perception of the fitness or unfitness of notes to be used in a contrapuntal passage. Mr. Gilman sometimes called upon him to stand up at the blackboard, and then and there put the counterpoint to a given *canto fermo*. On such occasions the Genius was naturally nervous, and made no very tidy business of it, but the crooked, smudgy notes were invariably correct as music, and Mr. Gilman's satisfaction at that made their want of his own scrupulous neatness seem pardonable.

I confess to having envied Job sorely. It is not pleasant to find one's own level when that happens to be unexpectedly low, and now that the fact was forced upon me that any talent I possessed was completely put into the shade by the natural gifts of an awkward country lad, who had not so much as known his notes till I showed him them, the discovery was hard to bear, and I cried bitterly over the downfall of my hopes. But by degrees I learnt to look with calmer, more impartial eyes upon my true status as a musician, and to recognise without pain the fact that my taste for music, and patient plodding industry at it, were in no way akin to genius.

At the end of the second series of lectures, the class generally felt that it had reached the end of its tether, and no one had the courage or perseverance to volunteer for a third course. Mr. Gilman brought the last lecture to a close by kindly offering to look over any exercises we might like to send him from time to time.

"I hope, Miss Russell, that you for one will take me at my word," he said, turning to me with a pleasant, encouraging smile—I think he must have guessed something of my humiliation—"I should be very sorry to think that you were not persevering after doing so much. As for you, Christie," he continued, laying his hand on Job's shoulder, "it is very clear what ought to become of you, and I want to speak to your father on the subject. Will you show me the way to your home, presently?"

The Genius looked rather alarmed, but was too shy to offer any objection, and after the class had dispersed master and pupil went together to Farmer Christie's. I knew enough of the man to guess the cause of Job's hesitation. He was a close-fisted, hot-tempered old fellow, ruled by the stubbornness of John Bull incarnate, and as he had looked with extreme disfavour throughout on Job's musical proclivities, he was not likely to receive with over-civility the man who had so warmly encouraged them, or to countenance any project which had in view their further development.

Next day I heard the result of the interview, for Mr. Gilman called to see me and asked my help in this very matter.

"My idea," he said, "was for Job to study at a College in London, where he would receive a thorough training, and in the end obtain a certificate, which would insure his finding plenty of work afterwards. But old Christie was up in arms the moment he got an inkling that an attack was being made on his pocket. He stormed away like mad, raved about the 'pouns and pouns' he had paid away for schooling already, declared he had just got the boy an excellent situation at a grocer's in Ashdale, and swore that if he heard any more of Job's music, he would put all his precious books and scrawls into the fire, and whip him into submission. Every word I said only angered him the more, so I came away pretty quickly—altogether repulsed. You see I was a stranger, and perhaps wanting in tact. That is my reason for coming to you, Miss Russell: I feel sure that, if you would interest yourself in the matter, you could talk the old man over."

"What makes you think so?" I asked, rather surprised.

"I have heard something of your powers of persuasion," replied Mr. Gilman, with a slight smile and bow, "and do not believe that Farmer Christie could resist a lady who successfully decoyed into her net the first twelve members of my harmony class."

"I am afraid this is a hopeless case, though," I said laughing.

"Why? Is he quite obdurate?"

"On money matters, yes," I replied; "I don't suppose there's any power in heaven or earth would induce him to supply Job with money, now that he expects him to earn it."

"Really?" Mr. Gilman looked very disappointed. "It is a burning shame to put that lad to anything but music," he continued warmly. "I would advance the money myself, if I could afford it; but I can't, and so shall apparently be obliged to stand by and see a boy of exceptional musical ability thrown away behind a grocer's counter."

"Don't you think his genius would develop of itself in spite of all hindrance?" I asked.

Mr. Gilman shook his head. "No, I don't quite think that in his case," he said, "but with proper cultivation it ought to reach a very high level."

At the close of the conversation I promised to do my best, and paid a visit to Farmer Christie that same afternoon. As I had foreseen, he was deaf to reason and entreaty alike: I might as well have attempted to move one of the great oaks which had stood in proud defiance of change for more than a century before the windows of the old homestead, as seek to alter his resolve to spend no more on Job.

"Ah, farmer," I said at last, regretfully, "it is a pity to think what an opportunity you are letting slip. Job would double and treble your money in a few years' time."

"So you say, miss, so you say. But there's a good proverb mayhap you've heard—'A bird in th' hand's worth two in the bush;' an' Job's got a bird in his hand worth five shillin's a week, and he shan't let it go."

"You won't even lend him the money?"

"Naw, naw," said the farmer, slapping his pocket. "An' look ye here, miss, I'm just about tired of a' this argufyin' and interferin' in my affairs, and I'll not stan' it any longer."

When Farmer Christie began to stamp his foot, it was high time a lady should quit his presence; besides, it was no sort of use expostulating any further. So without more ado I wished him good morning, and took my departure. I must have carried away with me on my face the signs of my chagrin and disappointment, for presently when I met Mr. Harding in the lane he inquired at once what was the matter. Thus invited, I poured out to him my troubles on Job's behalf. Mr. Harding listened in silence till I finished, then said quietly—

"Why didn't you appeal to me at once? If funds are all that are needed, I shall be very happy to advance them."

He spoke as if his willingness to do so ought to have been taken as a matter of course, and waived the thanks that sprang to my lips.

"Such a phenomenon as a Shallerton genius doesn't make its appearance every day," he declared, "and ought to be made the most of."

His liberality very quickly altered the whole aspect of affairs. Farmer Christie's objections, which were solely of a pecuniary nature, were satisfactorily disposed of, and he gave his gracious consent to Job's accepting Mr. Harding's generous offer.

To follow out in detail the career of our Genius at the College in London, and subsequently, would far overstep the limits of this paper. I will only say that his success in every way answered our expectations, that on leaving the College he at once obtained an excellent appointment as organist at a large London church, and that in the course of time he became well known as a composer of church music.

The consciousness of having produced a genius had a most beneficial effect on Shallerton, and a sort of rage for music set in, which lasted long enough to make a radical change in the musical attitude of the whole place. When Mr. Gilman started a boys' choir at Ashdale Church, we straightway set up one in rivalry—but of that some other time. H. L.

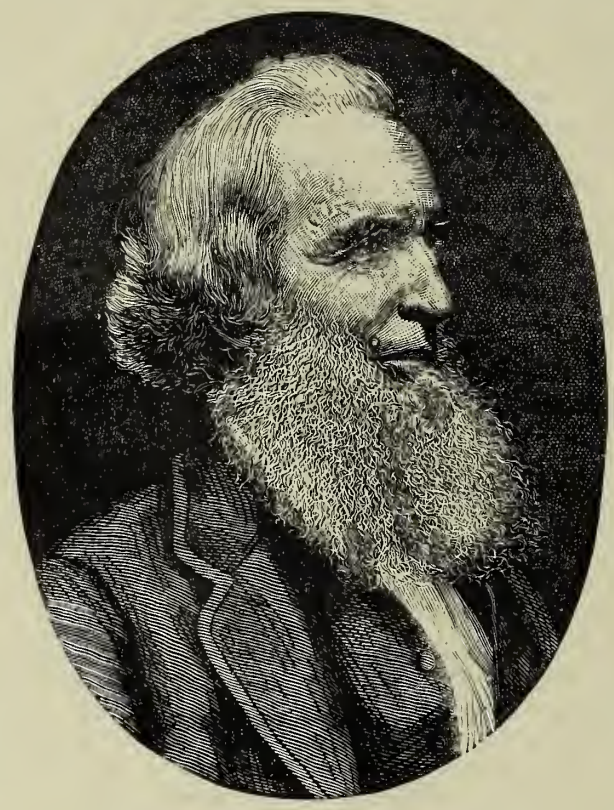
A MILLIONAIRE PHILANTHROPIST.

NEARLY eighty years ago a poor boy, about eight years of age, began his business life by vending cakes in the streets of Kidderminster. On Thursday, June 16th, 1881, that whilom cake-merchant died at Erdington, near Birmingham, full of years and honours, a millionaire in fortune, but leaving behind him what is more priceless than untold gold, the reputation of a blameless life, and vast educational establishments built under his own personal inspection, and endowed at his sole cost. The career of Sir Josiah Mason was full of varied interest, and deserves to be ranked with that of the Crossleys, Titus Salt, or any other of those "merchant princes" whose lives have furnished fitting material for appreciative biographers.

Born on the 23rd, of February, 1795, in Mill Street, Kidderminster, Josiah Mason was the second son of a poor carpet-weaver, so poor that he could only afford to send his child for a few months to a dame-school in the cottage next his own; and, as we have said, at eight years old the boy was compelled to face the world on his own account, selling cakes from door to door. After a time he ventured on a higher flight, and having procured a donkey, with panniers, he pursued the calling of a dealer in fruits and vegetables, till he had reached his fifteenth year. Tired of street-life, and largely influenced by a desire to tarry at home with a sick brother, Josiah taught himself shoe-making; but, as he often said in after-life, although he used the best leather and put into it his best work, he could not make it pay, and so gave it up. Meanwhile he had been trying hard at self-improvement, being helped to a knowledge of the art of writing by attendance at various Sunday-schools.

From fifteen to twenty, he tried his hand successively at various occupations, including shopkeeping, baking, carpentering, blacksmith's work, house painting, and finally his father's old trade of carpet-weaving. Resolved to try a wider field for enterprise, he removed to Birminghan, where he fell in love with, and married (on the 18th of August, 1817) his cousin, Anne Griffiths, a union prolonged in mutual confidence and happiness for fifty-three years. In Birmingham he worked at a small gilt toy business, in which, however, although he was making the business a success, he was deceived by a partner, and at twenty-seven years of age was thrown upon the world without work and without money. At this time he was, under circumstances of some interest, introduced to the business to which his after-life was devoted. Some one who knew his character and circumstances took him to Mr. Harrison, split-ring manufacturer, of Lancaster Street, Birmingham, saying, "This is the very man you want." Mr. Harrison, disappointed probably by many previous applicants, rather coldly remarked, "I have had a good many young men come here, but

they were afraid of dirtying their fingers." Young Mason, who had been standing quietly in the background, raised his hands and, looking at his extended fingers, said, with a quaint humour that characterised him throughout life, "Are you ashamed of dirtying yourselves to get your own living?" This unstudied touch of nature so impressed Mr. Harrison, that he at once closed with his visitor, to whom he sold his business twelve months later for £500, Mr. Mason being able to pay for it out of his first year's profits.



Faithfully yours
Josiah Mason

The story of Josiah Mason's business life thenceforward reads like a chapter from a fairy tale. Inventing a machine for bevelling hoop rings, he so reduced the cost and increased the speed of manufacturing them, that a clear gain of £1,000 resulted from its first year's use. The first machine so constructed was made in 1825, and was until very recently still in use in the large works at Lancaster Street. To the split-ring trade Mr. Mason quickly added that of making steel pens. Mr. James Perry, of Manchester and London, had been the first maker of these, preceding by a short time the earliest Birmingham makers. The two latter had begun to make the slit in their pens by machinery, while in Mr. Perry's the slit was made by means of a hammer. At that time nine pens were sold upon a card for three and sixpence; and one of these falling into Josiah Mason's hands, he set about devising improvements, and the same evening made three pens, which he sent in a letter—for which he had to pay ninepence postage — to Mr. Perry. That gentleman at once saw the value of the improvement, hastened to Birmingham, and had an interview with Mr. Mason, who from that time onwards became the sole maker of the pens sold under Perry's name. The trade at first was of very modest proportions, the old account books showing that in 1829 and 1830 orders were executed by twenty or thirty gross at a time, from which the concern grew until Mr. Mason became the largest pen-maker in the world. In 1830 twelve workpeople were employed in Lancaster Street, and 112 lbs. of steel was thought a large quantity to roll for a week's consumption. In 1874, towards the close of Mr. Mason's connection with the works, nearly a thousand persons were employed, the quantity of steel rolled every week for pen-making exceeded three tons, and about sixty tons of pens were constantly in movement throughout the building, in one or other of the many stages of manufacture. The significance of these figures will be better understood when we add that there are probably a million and a half of pens to a ton.

Throughout his long business career Mr. Mason was connected with other branches of trade besides those more immediately associated with his name. Thus he was largely interested in the development of electro-plating, and the great show-rooms and workshops of the firm in Newhall Street, one of the sights of Birmingham, were planned by him and erected under his direction. In the same connection, too, he established extensive copper-smelting works at Pembrey, in South Wales, and indirectly was associated with the manufacture of india-rubber rings. Mr. Mason retired from the business of electro-plating in 1856. From the original business in Lancaster Street he retired in 1875, when the concern was transferred to a limited company. He had, however, previously established a large business as a nickel refiner, with which he was connected till his death.

From these various businesses Josiah Mason accumulated a large fortune, of which in many ways unknown to the public at large he made good use. Two great works of benevolence will always be associated with his name, the Orphanage at Erdington and the Science College opened rather more than a year ago in Birmingham. The former is the development of an Almshouse for thirty women, and an Orphanage for fifty girls, which he established in 1858. Though having no children of his own, Josiah Mason had a tender regard for little ones, and laboured in various ways to promote their welfare. The first stone of the

larger Orphanage was laid in 1860, and for eight years the founder personally superintended its erection, expending £60,000 upon the immense building. By a deed executed in August, 1868, he transferred the building, together with an endowment in land, &c., valued at £200,000, to seven trustees, to whom seven others will now have to be added by the Town Council of Birmingham. The Orphanage, which has been enlarged since its opening, is now capable of receiving 300 girls, 150 boys, and 50 infants; and admission is limited by no restriction of locality, class, or creed. The College, which occupies a prominent site near the Birmingham Town Hall, was founded by deed executed in 1870, property valued at £100,000 being vested in the trustees. The actual work of erection was not commenced till 1875, when Sir Josiah Mason (for he had received the honour of knighthood several years previously) laid the first stone on his eightieth birthday (February 23rd). On the founder's eighty-fifth birthday, February 23rd, 1880, the building was opened by an address by Professor Huxley. The cost of the building, in addition to the endowment of £100,000, was £60,000; and to obviate the necessity of trenching upon the foundation, the founder furnished the College throughout before handing it over to the trustees. Like the Orphanage, the College is without restriction of class or creed. The first intention had been to limit the instruction to scientific subjects—mathematics, chemistry, physics, and biology; but to these have since been added physiology, geology, engineering, classics, English language and literature, German and French, with discretionary powers to the trustees in regard to other subjects.

A long life of honourable industry has thus been crowned by permanent endowments, that will carry down to posterity a name that for full half a century has been "familiar as a household word" throughout the Midlands.

THE WAR OFFICE.

AVERY high authority has declared that "the Horse Guards is, without flattery, the ugliest building in the metropolis." Ugly as it is, it is probably the best-known building in the metropolis. If there were nothing else to draw attention to it, the mounted Dragoons in the boxes at the gateway would do so. All day long, in all weathers, groups of people stand gazing at these colossal sentinels, and watching the tall figures of the Guards marching up and down within the courtyard. The sight is familiar to every youthful Londoner; and it is one of which country visitors, both young and old, retain most vivid and delighted recollections.

Time was when those mighty men-in-armour were really "guards" of one of the chief Departments of State. They kept watch and ward over the persons and records of the War Minister, the Commander-in-Chief, and all the great officials charged with the control of the British Army. But they discharge no such important functions now; the building, though still called the Horse Guards, is really little more than a Guards' barracks, all the great military officials having long since migrated to the War Office in Pall Mall and premises elsewhere, selected for the different branches of Administration. Down to the year 1854 there were a Secretary *for* War, and a Secretary *at* War, these two officials dividing between them the political, financial, and administrative concerns of the country in reference to the army. Then there was a Commander-in-Chief, who was entrusted with the control of the Cavalry and the Infantry only; for the management of the Artillery and Engineers there was another authority, called the Board of Ordnance. Another "Board" regulated the clothing of the army, another Department was responsible for the Commissariat, still another for the medical requirements of the forces; and, finally, there was a Department specially charged with the duty of supplying the army with chaplains. All these various Departments were independent of each other: communication between them was conducted through the office of the Secretary of State; and it was only through his office that any one Department could possibly obtain from another Department what was required for carrying out any great military measure. The War Department at that time was rightly named the "Circumlocution Office." The disasters of the Crimean campaign put an end to this state of things. The office of Secretary *at* War was abolished; the Secretary *for* War ceased to be also Secretary for the Colonies (as he had hitherto been), and was charged with the administration of the army as a whole. Numerous other alterations in names of offices and the duties connected with them followed very shortly; and in the year 1870, by Act of Parliament, and by Orders in Council, the work of unification was completed—the direct and immediate control of the army in all its branches being thereby vested in the Secretary of State for War.

It was a curious coincidence that two of the chief military offices were held just before these changes were made by noblemen who had each suffered the loss of a limb in battle. Lord Raglan, who was Secretary at War, and Lord Hardinge, who was Commander-in-Chief, were both one-armed men.

The Secretary of State for War stands, in relation to the army, next the Sovereign; and, by delegation from the Crown, holds the supreme authority and command of all the military forces of the realm. The building in which he exercises these august functions

can hardly be considered worthy of a service which costs the State upwards of £15,000,000 per annum. Standing, as it does, in the very midst of Club-land, the War Office presents a most sorry appearance to the wanderer in Pall Mall. The statue of Sidney Herbert stands in front of the entrance to the principal building, which is placed a little back from the road, and is occupied by the Secretary of State and his staff. The head-quarters of the Commander-in-Chief and his staff are at the eastern extremity of the block—the building once known as Buckingham House. On entering the vestibule the visitor is questioned by a porter as to what Department he is in search of. A bell is rung, and the visitor, passing forward, is met on the stairs by an attendant, who directs him to the proper office, where he is received with the utmost possible courtesy.

With the exception of a quaint old hall, and what was doubtless once considered a noble staircase, there is absolutely no architectural feature worth noting in the entire building. One soon discovers, however, that the amount of work which is done in the War Office is prodigious, and that the manner in which it is done is marvellously interesting. It will probably surprise some of our readers to learn that the most enormous pile of letters daily delivered at the Government Offices is that which is received by the Secretary of State for War. Three great sacks arrive by the "morning post;" and as every delivery during the day brings further despatches, the number of communications received in ordinary times reaches about a thousand, while in seasons of "war and rumours of war" this number is greatly exceeded.

All letters arriving, whether by post or by messenger, are received at the "Registry"—a Department which is so perfectly organised that it has become a model to all other Government Offices, not only at home, but also in India and some of the Colonies. The "alphabetical" principle of classification is discarded at this office, and that of "subjects" is adopted all through the establishment. The letters are therefore, in the first place, roughly sorted, and placed in boxes duly labelled according to the different subjects to which the communications may refer. They are then placed on the desk of the chief of the "Registry" Department, who, with his assistant, goes through each pile, and marks every single document with such signs as will indicate to his subordinates whither that particular document is to be sent for attention or consideration. Every letter is then registered, the record giving the date, name, and subject of the letter, and also the Department to which it will first be sent. The letter is then enclosed within a printed form, on the outside of which a clear "reference" to the "register" is given. If the letter be urgent, it is enclosed in a green form, specially signifying to all whom it may concern that it is to have immediate attention. The letters are then passed on to the "Transit" room, where all the papers for certain Departments are collected in pigeon-holes, to be forwarded in due course. There are three despatches daily from the "Transit" room to the various branches and Departments, so that every letter received at the War Office finds its way, with the least possible delay, into the hands of the official whose duty it may be to deal with it and prepare the necessary reply.

On inquiring what becomes of all the multitudinous letters and papers which thus daily accumulate at the War Office, we are conducted to the Press Room, where all correspondence when "closed" is deposited. Every inch of space in this room not required for the clerks' desks is occupied with tiers of numbered shelves, every one of which holds a box or case plainly labelled in front. This and other similar rooms contain all the documents that have been received by the War Department for the greater part of the present century; and one of these cases will become the final "resting-place" of every letter delivered at the War Office to-day. When a letter has been replied to, it is attached to a copy of the reply, and, together with the various papers supplied in connection with the matter by the different officials, it is encircled by a band, so as to make one packet: this packet is duly registered, marked with the register number and other memoranda, and then placed in the case or "press" specified for it. All this is so carefully done, and the register is so precisely kept, that should any particular document be asked for fifty years hence, it will be producible in a few minutes.

An interesting feature of this Department is the system of registration adopted with regard to the officers. Every officer in the army, whatever his rank, has a number at the War Office; every letter or paper received from him, or in connection with him, is marked with that number, and all these documents are kept in one "press." When, therefore, any information is required in relation to any officer, the clerk in charge has simply to turn to the officer's number in the register, and he learns at a glance where he will find the "press" which contains every detail of that officer's career, from his entering the army down to the very day on which the inquiry is made.

The room occupied by the Secretary of State for War is a handsome apartment, situated about the centre of the building on the side looking towards St. James's Park. His private secretaries are located in rooms adjoining that of their chief; in fact, separating his *sanctum* from that *sanctum sanctorum* in which H.R.H. "the Duke" discharges the duties belonging to the office of "Field-Marshal Commanding-in-Chief."

The actual administrative work of the War Department is divided between three great officers, any or all of whom may be, and usually are, in Parliament. The Secretary of State is, of course, supreme controller of the Department, then under him there are (1) The Officer Commanding-in-Chief, who is in charge of the *personnel* of all the "regular" and "irregular" forces forming the army; (2) the Surveyor-General of Ordnance, under whom are all the civil administrative duties, with the charge of the *matériel;* and (3) the Financial Secretary, who is responsible to the Secretary of State for the "Estimates" presented to Parliament, for the appropriation of all funds, and the

proper auditing of all accounts; the "Army Pay" Department is also under his control. What is called the "Central Department" forms the province of the Under-Secretaries of State for War, whose functions are limited to the conduct of such constitutional or other matters as do not specifically pertain to either of the three great offices just named.

The Secretary of State is assisted by a "Parliamentary Under-Secretary of State," who holds office only so long as his chief retains the seals; also by a "Permanent Under-Secretary of State," whose tenure of office is not affected by the political changes which may "pull down" one chief ruler and "set up" another.

The staff of the War Office numbers nearly 500 actually "on the establishment," *i.e.*, permanently engaged; but besides these there are many *employés*, writers (paid by the hour), and others, whose services are secured as the exigencies of the Department vary.

In the basement of the War Office there is a large printing establishment, in which some fifty persons are employed producing such official documents as are required day by day. All "private and confidential" papers are printed here. To insure the necessary secrecy in such matters, the "copy" is cut up by the foreman into small portions, and is thus "set up" by different compositors, so that until the whole of the portions are brought together on the press, no workman can form any idea of the actual contents of the paper itself. The copies are then struck off under the immediate supervision of a thoroughly trustworthy inspector, and by him are taken charge of on behalf of the high official who may have ordered them to be prepared.

J. T. G.

WHAT TO WEAR.

CHIT-CHAT ON DRESS. BY OUR PARIS CORRESPONDENT.



WITH the advent of August weather it becomes necessary to think of suitable materials. There is an abundant supply to meet the demand, and I will enumerate a few amongst the many which are appropriate, beginning with those intended for morning gowns. Neutral-tinted summer bèges in stripes, checks, and basket patterns are popular, as are vicunas and foulés in all shades. Then there is a fine make of serge called "Casimir" which is seen in various qualities, also the "Umritzurs," and Indian cashmeres of light texture. A new colour is "Crushed Strawberry," a bright variety of terra-cotta.

"Nun's-cloth," which after all much resembles the Carmelite or mousseline de laine of our youthful days, is very cool and light, and is principally worn in delicate tints. "Satin Chalé" is another new fabric so called, but in truth old friends greet us everywhere under a fresh guise. Amongst the later introductions is the "Moire Français," which is softer than the old-fashioned moire antique of our grandmothers' days, and probably not so lasting as in those good old times, when the goring of skirts was unknown, and silks "stood alone" in their stiffness—often indeed passed on to the next generation with their glory untarnished. Instead of the large running pattern, we now have stripes of different widths, occasionally divided by one of narrower dimensions. Moires look handsome combined with Satin Merveilleux, especially in black, but it is probable that the fancy for them will be evanescent, as is the case with the many-tinted ombrés which have been so quickly copied in common silks and ribbons. A novelty is the "Printed Satin Merveilleux," and one well adapted for summer wear. It is seen in many tints—such, for example, as a terra-cotta ground with pattern of broken leaves or daisies. Another new fabric is "Lace Muslin" for quite warm weather. Surahs, fancy *mat* stripes in washing-silks, and Neapolitan stripes in foulards, come next in order. Bayadere silks, again, are stylish for trimming cashmere. Stripes are considered much better taste in Paris than ombré or shaded mixtures. For instance, a handsome costume had kiltings of old-gold and cardinal striped silk, with bodice and drapery of grenat Satin Merveilleux. Another effective combination of colouring is of sapphire and bleu ciel.

A very useful and a very fashionable garment is the Louis Quinze coat, which can be worn over any skirt. It is made of black brocatelle, Oriental broché, striped Satin de Lyons, and plain velvet, and is either perfectly tight-fitting, with pockets on the hips, or the back drapery falls in plaited paniers.

I must now say a few words about the sateens, many of which are exquisite this season. The best ones are generally block patterns, so that only a certain number of each design can be printed. Among the newest are the bordered sateens, and ombré stripes with tiny sprays of flowers in contrasting shades; also the Tussore cotton in Japanese designs, such as broken squares in soft tints of china blue, pink, and olive. Oriental and Egyptian patterns are very original, and a quaint idea is that of dull green leaves on a sapphire



ground, with large beetles, just touched with red, scattered liberally over the surface. Among the oddities may be classed Japanese pictures, birds' nests, and a border with peacocks introduced.

A beautifully finished design is the pansy in *feuilles mortes* tints on a dark ground, or in shaded greys for half-mourning. Fleur-de-lys, roses, and carnations are also to be seen in every imaginable shade.

Zephyr cloths, either plain or with bordered ombré stripes, are much worn. Delicate French greys have an old-gold or shaded brown border, and are excessively pretty. They are also made in small shepherd's checks and plaids. Pink ginghams are also most popular. These are all really good washing materials, and come into favour again and again.

With regard to the make of gowns, there is not any very striking novelty to record since last month. Gaugings are still to the fore, and to make a change the honeycomb pattern is being revived. The drawings are taken up at the back of the material, and caught on the surface in the shape of diamonds. Children's frocks look very pretty ornamented in this manner. Another good effect is obtained by a succession of drawing-strings close together forming puckers. A becoming costume for a young girl of slight figure is made in a soft clinging cashmere or serge of neutral tint, with a deep kilt round the short skirt. The bodice has a broad gauging round the neck as in a Mother Hubbard cloak, the fulness being drawn down in folds to meet the drapery, and confined round the waist with a band. The sleeves have a succession of drawn puffs from shoulder to wrist.

Washing-gowns are generally made with gauged or plaited kilts edged with lace, and the bodice is drawn to match. The bordered Zephyr cloths and sateens have an edging of the stripe down the front of the bodice



and tunic, whilst the skirt has kiltings of the stripe alone. A novelty for kiltings is an alternate stripe and small check, the latter being intended to fall between each fold, and just peep out with the movement of walking. Pretty little drawn capes to match the costume are general. Washing-silks or any light materials are often made up with innumerable tucks, both on skirt and bodice; they should be all hand-run to look well.

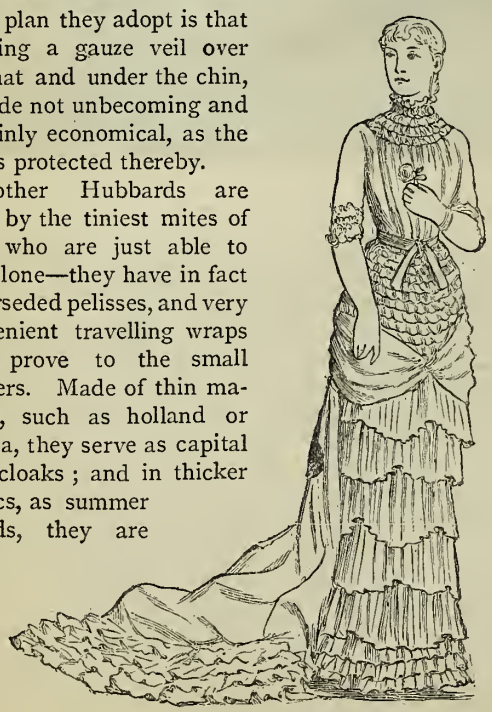
Bonnets are either very large and fully trimmed, or close and small. Tuscan straw is much worn, and various fancy straws are seen. A new shade is called "Bronze d'Art." Watered ribbons are often adopted for strings. The hats intended for young girls are usually broad-brimmed and turned up on one side, or immediately in the front, with a bouquet of flowers and long white feather; others have two or three roses inserted beneath the brim. The shape known as "Cherry Ripe," with a crinkled border, is simply trimmed with lace, and has a slight touch of colour. Black lace hats are generally becoming, whilst some of the French white lace garden hats are really lovely.

After all, a young and pretty face looks well in almost anything, but for those of maturer age there is more difficulty. There is, however, plenty of choice for these latter; a slight variation of the "Princess" shape is still much in vogue. Sometimes the crown is of gauged satin, with a trimming of the same in full puckers round the front and a tiny bird on one side. The "Plate" shape is another of the close-fitting order. This has a bandeau applied with wreath of flowers laid upon it. Then again there is the "Flower" bonnet, entirely composed of roses, with a slight admixture of black lace. Larger shapes of the Normandy type are fully trimmed with feathers and flowers. Old-gold Spanish lace is often very effective with one or two brilliant roses peeping out.

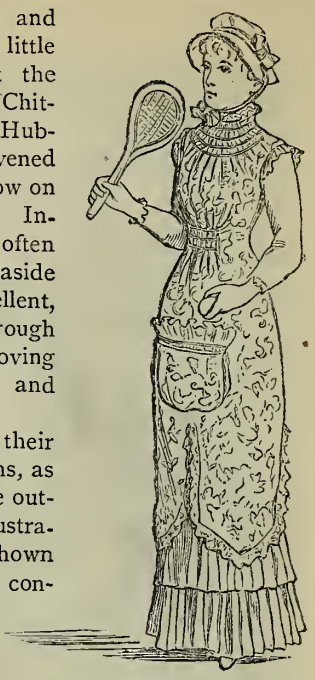
Artificial flowers are so exquisite that they deserve a few words of comment. Roses are undoubtedly the favourites *par excellence*, and especially the homely cabbage roses, called in France "roses du roi," have been more affected by Parisians than any other floral treasures. Marguerites are also very much used. Clusters of flowers are worn on evening dresses, either at the waist or shoulder; and often a bunch of pale pink blush-roses, or the delicate "roses de thé," are so perfect that involuntarily we bend over them to inhale their fragrance. These, however, are works of art in their way, and out of reach for slender purses, especially when constant change is requisite. A very good plan is to mix a few fronds of fern or any lasting foliage with two or three unmounted roses, and when this is skilfully done they will often defy detection. Delicate blossoms *au naturel* soon fade in a heated atmosphere, and give an untidy appearance to a costume before the evening is over.

Parasols this year are varied and beautiful, the favourites being those with either hand-painted groups of flowers on one side, or the monogram of the owner. The Japanese shape is often ornamented in this way. Others are covered with hanging drops of steel, gold, or jet. These are all somewhat costly, but many of the sateens to match the costumes are most effective, and much more moderate in price.

As the travelling season is now at its height, there are plenty of Americans in Paris, and highly practical are several of their dress arrangements. For hot dusty days, many adopt when travelling brown holland ulsters, which are cool and light, and keep off the dust which will insinuate itself through even closed railway carriage-windows. Such ulsters wash well, and therefore are ever fresh. Another good plan they adopt is that of tying a gauze veil over the hat and under the chin, a mode not unbecoming and certainly economical, as the hat is protected thereby.



Mother Hubbards are worn by the tiniest mites of girls who are just able to run alone—they have in fact superseded pelisses, and very convenient travelling wraps they prove to the small wearers. Made of thin material, such as holland or alpaca, they serve as capital dust-cloaks; and in thicker fabrics, as summer tweeds, they are comfortable on chilly and showery days. The little damsel who stands at the commencement of this Chit-chat sports a Mother Hubbard of écru Tussore enlivened with red bows, and the bow on the bonnet is also red. In-grain Turkey twill is now often substituted for silk for seaside wear; the colour is excellent, and the material stands rough usage better than silk, proving altogether an effective and cheap trimming.



Gatherings have found their way to lawn tennis aprons, as will be seen on one of the outlined figures among the illustrations. The apron here shown has the pouch placed conveniently for the player. There are gaugings round the neck and at the waist, also a row or two below the upright frill of the pouch. The second outlined figure is prettily dressed in a demi-evening toilette. The material is crevette or salmon pink Umritzur cashmere, gauged at the throat and below the waist; a satin belt to match, the elbow-sleeves being turned up with lace. These Umritzur cashmeres are very popular with English girls, especially with followers of the æsthetic school. In Paris, "Sicilienne" takes its place, a soft clinging silk, without sheen, resembling Irish poplin but finer, altogether a graceful fabric which, strange to say, has never won much favour in England.

The group at the seaside, watching the "ships come in," offers many suggestions for the making up of washing-frocks, as well as for the thin woollen dresses always requisite in this country, even in midsummer. Both the first and last costumes may be made in thin serge—dark green or blue—combined with satin to match, shot with red or orange. The other dresses are to be made in foulard, sateen, or cambric. One of the promenaders wears a Mother Hubbard cape; a second is attired in Kate Greenaway style—she holds a parasol covered with rows of creamy lace; a fourth wears a flowered cambric Watteau polonaise, ornamented down the front with loops of gay shaded ribbon; the graceful plait at the back characteristic of this style is eminently becoming to slight supple figures.

In the second group other fashions are suggested suitable for cambrics, grenadines, gauzes, foulards, &c. The gathered bodice with Swiss belt is the popular make for pink cambrics, the gauged sleeves being especially pretty. The small boy's purple velvet suit, with blue silk stockings, is designed to be worn at a wedding or similar festive occasion; while the girl, in her holland blouse with scarlet frilling, is attired for a run on the sands.

THE GATHERER.

New Use of the Telephone.

The more generally the telephone is employed, the wider are found the uses to which it can be put. The latest, or at all events one of the latest, is both ingenious and useful. M. Dohrn has for some time been conducting scientific explorations in the bed of the Bay of Naples, and it is in connection with these investigations that he has introduced the telephone. In consequence of this use of the instrument, the operations of the divers have become considerably facilitated. These submarine workers are able to communicate with the boatmen overhead, not only without loss of time, but with absolute accuracy. It will thus be seen that the telephone may be made the means of materially reducing the perils as well as the inconvenience and hardships of the diver's occupation.

A Protective Bloom for Steel.

Steel ornaments and utensils are of course liable to rust, and the new processes, such as that of Barffe, for coating the metal with a non-oxidisable skin of rust are now well known and very valuable. They cannot, however, be applied by any private individual, because they are protected by patent, and moreover require expensive apparatus. It is interesting therefore to learn that Dr. Guthrie has accidentally discovered a very cheap and simple plan for giving a beautiful bluish-black skin, or rather bloom, to steel watch-chains, keys, or other articles. This consists in plunging them for a short time in fused nitrate of potash or common nitre. The bloom is non-rusting, and makes the steel able to resist the corrosion of damp, and moist air. Any one can apply it for himself, as there is no patent to prevent him.

A New Thermograph.

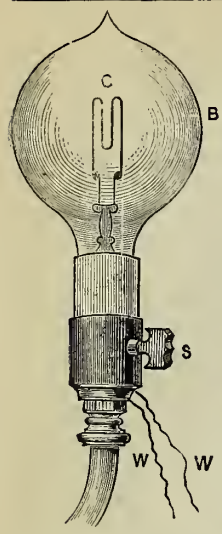
An ingenious thermometer for constantly recording the temperature of a patient's body has been contrived by Dr. W. Adams. The principle is a combination of the ordinary metallic thermometer and the micro-tasimeter of Mr. Edison. The sensitive part consists of a delicate spiral spring, made of two fine strips of brass and iron soldered together, the brass being outermost. The unequal expansion of these two metals under a rise of temperature causes the spiral to press upon a small platinum piston, which enters a vulcanite tube filled with powdered plumbago, carbon, and silver dust. At the other end of this tube is a second plug of platinum, which is fixed, whereas the other is movable and under the control of the sensitive spring. A current of electricity flows through the conducting carbon-powder in the tube, and traverses an electro-magnet, which actuates a finely-pointed pencil, marking a line on a band of travelling paper. The spring operates like the metallic thermometer, and by its expansion might be made to actuate the marking-pencil direct; but far greater sensibility is obtained by introducing the principle of the micro-tasimeter, and magnifying the effect by means of the electric current. As is well known to electricians, the resistance of the carbon-powder to the electric current is proportional to the pressure on the powder; and when the piston is pressed by the spiral spring on the powder, the resistance of the latter diminishes, and the current correspondingly increases. This has the effect of adding to the strength of the electro-magnet, and consequently of moving the marking-point to a degree proportional to the temperature which deflected the spiral spring. Dr. Adams has also, we believe, applied this electrical device to the construction of a very sensitive pulse recorder.

Curious Optical Phenomena.

M. Treve is quoted as the authority for certain odd phenomena of optics and of vision. He mentions the circumstance that the flame of a lamp seems brighter, and that a vertical shaft, a post, or a mast is seen more distinctly, through a vertical than through a horizontal slit. On the other hand, he finds that a house, a landscape, or the face of the sun or moon is more clearly perceived through a horizontal aperture. He has noticed similar differences in photographs, according as the light passes from the object to the plate through a vertical or horizontal opening. He accounts for these varying effects by the action of diffused light.

Maxim's Electric Light.

It is now recognised by electricians that the kind of electric light suitable for domestic illumination is that in which a filament of carbon or other refractory material is heated to incandescence by the passage of an electric current. The arc lights, in which the electricity leaps across a gap of air from the point of one carbon rod to another, are so very powerful, and withal unsteady, that they are best adapted for the lighting of streets, factories, and other large areas. The incandescent lamps of Swan, Edison, and others are, however, eminently suited for lighting rooms and picture-galleries. Perhaps the best of these yet brought out, in point of beauty at least, is the incandescent carbon light of Mr. Maxim, of New York, recently introduced into London. As shown in the figure, the lamp consists of a glass bulb, B, containing a filament of carbon, C, bent into a double loop, and connected by suitable supports of platinum to the conducting wires, W W, which lead to the poles of the machine and convey the current to the loop. A screw-cock, S, turns on and off the current, and thereby the light—just as gas is turned off and on. When the current passes the carbon glows with a rich mellow lustre, resembling the flame of a wax taper, but still more pure and brilliant. The carbon is made by charring card-board, and the bulb is charged with



vapour of gasoline, which, by depositing carbon on the weaker and therefore hotter parts of the wick, thereby increases its durability. Thus far experience has shown that a burner of this kind will last from 600 to 900 hours. The lamps can be taken out of their sockets and replaced again in a moment, so that if any one should break down it can be readily superseded by a fresh one; and as they can be manufactured for a shilling each, the cost of an occasional breakage will not be heavy. The beauty of the light is of itself an inducement to adopt it in drawing-rooms or sumptuous saloons; but being entirely enclosed it is free even from the fumes of wax tapers, and hence cannot injure furniture or taint the air. Moreover each globe gives off far less heat than a gas or candle flame, so that the atmosphere is not made oppressively warm. For mining purposes the light is well adapted, since it can be wholly immersed in a clear vessel of water, out of the risk of setting fire to the fiery gases in the drifts. With regard to the cost of this illuminant, it is claimed that a No. 20 Maxim generator can feed eighty-five Maxim lights, each of twenty-five candle-power, in consuming ten horse-power of energy.

Indoor Rowing

An ingenious framework for giving the body all the exercise of rowing in-doors has been imported recently from the United States. It consists of a sliding-seat, with oar-handles and foot-rests; and the whole is so connected together that by its means a skilled rower can train himself in any weather, and a beginner can learn the art. By adjusting the apparatus it can be adapted to the strength of any person, and even to a child of twelve.

A Folding Cradle.

In America the simple cradle of our forefathers has been improved as well as other things, and is indeed scarcely recognisable beside the rocking-box which still does duty in this country. The curious framework shown in Fig. 1 is the latest development of the American baby-bed, and it is specially designed for transport by land or sea. It consists of a swinging cot made of two triangular frames supporting a canvas bottom and wicker sides. These frames are hung from a pair of axles, and can be swung to and fro by means of crank handles, or if desired by string or treadle. A bent rod from which a cloth or paper fan is suspended moves with the cradle, but in an opposite direction, so as to create a cooling air over the little sleeper's face. The whole appliance is made to fold up into the form illustrated in Fig. 2, so as to pack in handy bulk.

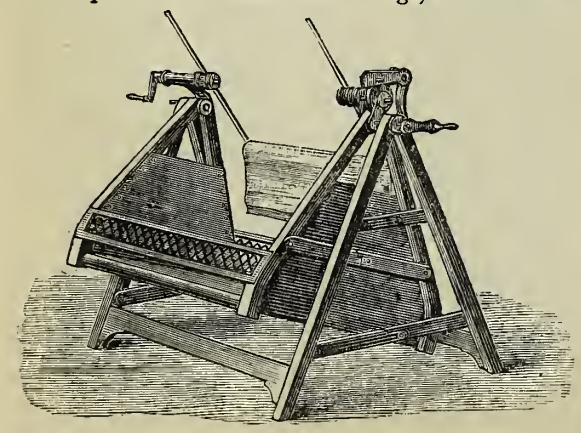


FIG. 1.



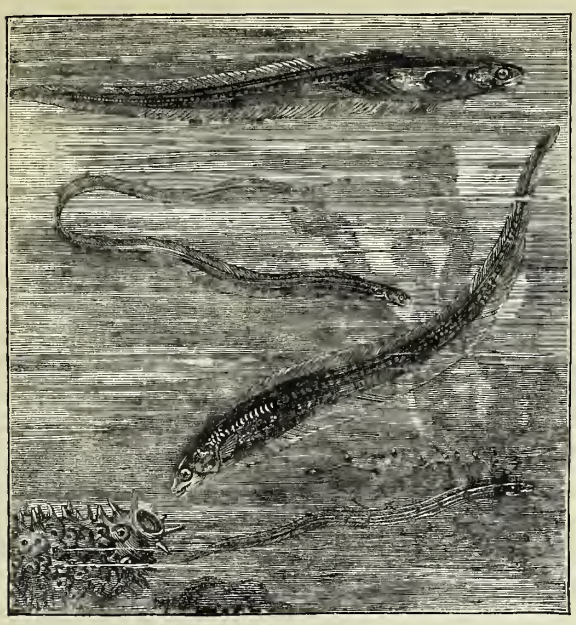
FIG. 2.

A Leech Barometer.

It has long been well known that the leech is highly sensitive to atmospheric changes, and Mr. A. W. Roberts tells us how a leech storm-glass may be fitted up. A tall candy jar is covered with a tin top in which several holes are bored, and at the bottom a floor of peat with two or three smooth stones is laid down. The jar is then filled with soft water, into which, after it has become quite clear, two or three medicinal leeches are placed. Heat being fatal to these animals, great care must be taken in summer to keep the jar in a cool shady spot, so as to lower the temperature as much as possible. So long as the weather remains calm and beautiful, the leeches lie motionless at the bottom of the vessel. On the approach of snow or rain, however, they will be found at the top, where they rest until the weather becomes again settled. A wind-storm coming on will cause them to gallop about in a lively fashion, while an approaching thunderstorm is a source of great uneasiness, making them try to seek a lodging above water, and move in convulsive-like threads. In clear frosts they lie constantly at the bottom. The water of the storm-glass must be changed every two weeks.

Smoke Abatement.

An exhibition of apparatus for the abatement of smoke is to be held this autumn at South Kensington, on the grounds of the world's fair of 1851. Heating, cooking, and lighting appliances of all kinds, artificial fuels, ventilators, chimneys, and so on will be displayed, and medals, prizes, and certificates are to be awarded to the successful exhibitors. The exposition will be of an international character, and under distinguished patronage. The date of opening is fixed for October 24th, the beginning of the winter season, and it will be illustrated by a series of explanatory lectures.

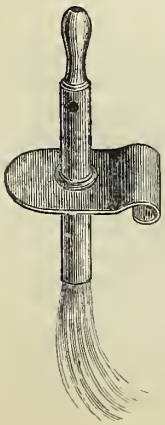


A Tenant Fish.

The Holothurian, or sea-cucumber, is a soft, fleshy creature of the snail description, with tubular feet, which help it over the sea-floor. They have long been supposed to harbour a curious fish within them; and recent investigation by Professor Emery, of Naples, has put the fact beyond a doubt. This naturalist finds that many of the Mediterranean Holothurians are inhabited by a small species of the *Fierasfer* fish, which lives in the cavity of the body, and seeks its own food by occasionally protruding its head. The creature is, therefore, not a true parasite, but merely a lodger, who has found in the interior of the sea-cucumber a safe retreat from his enemies. This uninvited guest is accurately represented in the accompanying illustration.

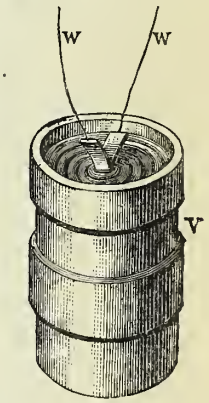
A Gas Fire-Lighter.

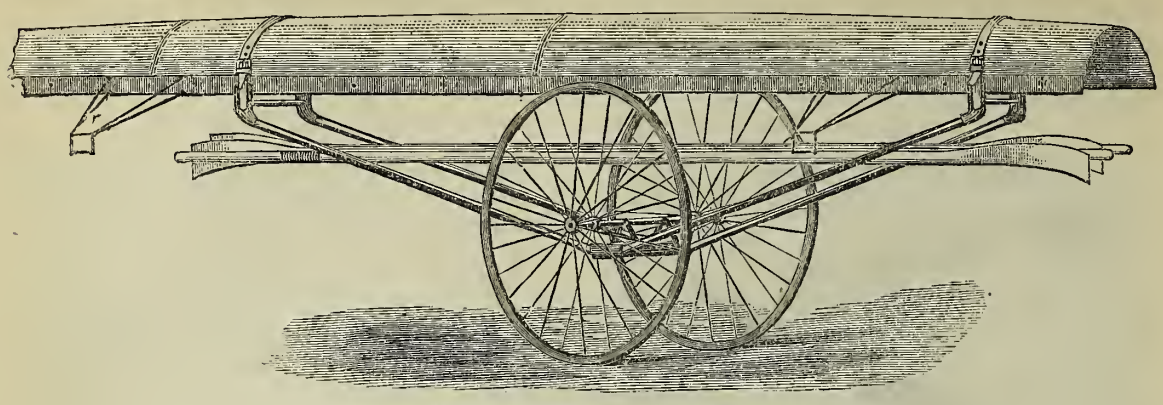
Wood and paper form after all a somewhat crude way of lighting a fire, especially when there is gas in the room. The little device of Mr. Fielding, which we illustrate, is therefore likely to recommend itself. It operates, as will be readily seen, by playing a strong jet of gas-flame on the coals. The gas is obtained by connecting the lighter to the nearest gas-burner by means of an india-rubber tube: and in six or eight minutes after the flame is applied to the coal-fire, the fuel will be thoroughly kindled. Since it was first introduced, a year or two ago, an improvement has been added to it in the shape of a small piece of gauze, which is screwed into the muzzle of the lighter, and prevents the blue flame flying back and burning with a white light. With this recent addition, it is claimed for the contrivance that it will light twenty fires with a consumption of one pennyworth of gas.



A Box of Electricity.

The apparatus for storing up electricity which has been devised by the French electrician, M. Faure, has been placed in the hands of our distinguished physicist, Sir William Thomson, who professes himself delighted with its performances, and is enthusiastic about its future. Each element of the "secondary battery," as shown in the accompanying figure, consists of a lead vessel, V, nine inches high by five inches in diameter. Into this is packed a pair of lead plates, each coated with red lead and sheathed in felt. These plates are rolled up together so as to occupy a small bulk, and the felt is moistened with sulphuric acid and water. On charging this contrivance with the current from a dynamo-electric generator or an ordinary voltaic battery, by connecting the two lead plates by wires, W W, to the poles of the generator, the current is accumulated in the cell, which thus becomes a veritable "box of electricity." Not less than a million foot-pounds of electric energy—that is to say, a quantity of energy capable of lifting a million pounds through the height of a foot—can be stored in one of these boxes weighing seventy-five pounds, and sent by rail or cart to any distance. The same quantity of energy, however, is known to exist in 1½ ounces of coal, so that a piece of coal is a far more portable form of latent power, even though only one-tenth of that potential energy can be turned into actual work by the best steam-engines. It is unlikely, then, that electric power will be conveyed from place to place in Faure accumulators on any extensive scale while coal is yet so plentiful. These apparatus will be chiefly used as local reservoirs of electricity, lodged in houses, as a water-cistern is, and periodically supplied with electricity for domestic purposes, by means of wires or other conductors. The electricity generated at a central station will be conveyed by a system of wires like water-pipes to the stationary accumulators of private consumers, where it can be employed to light their electric lamps, and drive their sewing-machines. Only under special circumstances will the batteries with their charge be transported in vehicles, and left at houses. In surgery, however, or in the working of military field telegraphs, and the explosion of mines or torpedoes, the Faure battery is likely to prove very serviceable. Already Professor George Buchanan, of the University, Glasgow, has performed the actual cautery with great success by means of the electricity bottled in one of Sir William Thomson's Faure batteries. By means of a fine platinum wire heated to incandescence by the current, he removed a nævoid tumour from the fore-tongue of





A COLLAPSING BOAT CARRIAGE.

a young lad in the course of a few minutes, and without the loss of a single drop of blood. The strength of the current and the compactness of the battery render it very convenient for work of this kind, and there is already a demand for it in the medical profession. We may also add that Professor Buchanan has found the Swan electric light, which consists of an incandescent carbon filament enclosed in a vacuum bulb of glass, very useful for illuminating inaccessible parts of the body.

Effect of Chloroform on Plants.

MM. Claude Bernard and Rabuteau have obtained some remarkable results from their experiments as to the action of anæsthetics on plants. They find that the vapour of chloroform and of ordinary ether retards the germination of seeds, bromide of ethyl and bromide of amyl having a similar effect. Grass seeds exposed for thirty-seven days to the vapour of bromide of ethyl or of amyl germinated, under proper conditions, in two days.

Experiments were also tried upon various plants in progress of growth. Growing cress after an exposure of two hours to an atmosphere saturated with vapour of bromide of ethyl became feeble, the leaves hanging down. After remaining in this enervated condition for two days it began to revive, but manifested less vigour of growth as compared with other plants of the same age. Acetate of ethyl is less powerful in its action ; cress lives after an exposure of three hours to its vapour, though an exposure of six hours kills it. It is highly interesting to note that anæsthetics exert the same kind of influence upon plants as upon animals.

A Collapsing Boat Carriage.

The delicate boats of racing crews are not unfrequently damaged by transport on carts from the railway station to the regatta course ; and yet a vehicle of some sort is necessary, for if the crew should attempt to carry the boat themselves the exertion might unduly fatigue them, and spoil their "form" for the coming struggle. A special boat carriage has therefore been introduced by Mr. F. E. Todd, and it is so light and portable that it can be easily dismantled and carried in the boat itself. This condition renders the invention very suitable for canoe excursions on the lochs of Scotland, where a narrow pass or watershed often separates two lonely sheets of water. Different classes are adapted to carry different kinds of boats. The engraving, for example, represents a carriage for fine racing fours, or other light boats of great length and narrow beam. It is supported from the axle on india-rubber springs, and runs with great smoothness. A net spread from the supports carries the oars and portmanteaus or other light impedimenta, and the boat rests bottom upwards on an adjustable table, which can be widened or narrowed to suit the beam of different craft.

A Disinfecting Paint.

The internal decoration of houses is now a subject of great interest, and it is therefore useful to know that a new paint, called Dry Calsomine, is rapidly growing into favour in America. It is said to be clean, wholesome, and beautiful, besides possessing disinfecting properties. The colours are sold in a dry state, and simply require to be mixed with water, in order to be ready for use. Paste and paper are apt to become decomposed, but these fresco paints remain always fresh and sweet. They are sold in strong Manilla paper boxes of 1 and 6 pounds in weight, and they will keep for years.

Flexible Ivory.

Ivory, which is in its normal state so hard and rigid, can nevertheless be softened artificially by the following process :—It is to be first immersed in a solution of pure phosphoric acid of specific gravity 1·3 until it loses, or partially loses its opacity, and becomes translucent. It is then washed in clean cold water and dried, when it will be found as flexible as leather ; but it speedily hardens on exposure to dry air. Dipping it in hot water will, however, soon restore its pliancy and softness.

Another method consists in plunging the ivory into a mixture of three ounces of nitric acid and fifteen ounces of water, and leaving it a-steep for three or four days, during which it softens.

The Corinthian Canal.

There is nothing new under the sun. Even the latest project of the enterprising French engineer has been in a measure anticipated. General Türr has been granted a commission by the Greek Government for the purpose of cutting a canal through the Isthmus of Corinth. It is curious that modern enterprise has not long since accomplished a feat which a glance at the map will show to be so obviously a convenience. The isthmus forms a slender barrier between the Gulf of Lepanto and the Gulf of Ægina, and consequently between the Adriatic and the Ægean. In the palmy days of Corinth the one drop of bitterness in the cup of its prosperity was the fact that it was obliged to possess two harbours, one on each side of the isthmus. To obviate the inconvenience a polished roadway was constructed, along which ships could be bodily dragged; and in the year B.C. 145 Nero, the Roman Emperor, turned his attention to the construction of a canal, the first works of which, or rather their ruins, still remain. The design was at length abandoned, although fortifications were erected that were found practically useless to the city, which would have greatly benefited by the construction of a canal. This most important undertaking will now be commenced. M. de Lesseps will do all he can to further the scheme. The benefits which must accrue to Greece, and particularly to Corinth, can scarcely be too highly estimated, and the new water-way will open a new era of prosperity for the modern Kingdom of Greece.



A Float Clock.

The ordinary clock is actuated by the descent of a weight, and regulated by the beats of a seconds pendulum; but both these functions are combined in a new time-keeper invented by M. Antoine, of Paris. The works are operated by means of a float, which descends gradually as the liquid in which it is floated is allowed to drain away. The descent is perfectly regular, and as there is no pendulum required, the clock has the advantage of being noiseless. It is, in fact, an indicating clepsydra of the most improved pattern. Where the clock-face is illuminated by a flame, the oil of the lamp is utilised as the supporting liquid.

Carving Glass.

It is generally a troublesome process to cut holes and lines in glass; but a German firm, Messrs. Richter and Co., of Chemnitz, have produced a very serviceable glass-cutter by impregnating small German silver discs with fragments of diamond. When fitted to a rapidly-rotating tool these grating surfaces abrade their way through glass or porcelain in a few seconds, and any desired pattern can be readily engraved, while the wear-and-tear of the disc itself is very slight indeed.

Metal Slates.

An American novelty of more than usual promise has been brought to this country in the form of metallic slates or shingles for roofing purposes. They are stamped out of thin sheet-iron, and are so shaped and corrugated as to interlock, and brave the stormiest weather. They are very light, easily laid, and pack in small compass. To prevent their rusting in the open air, they are coated with a special metallic paint, or with an alloy. More expensive ones are also protected by a glass enamel which is not liable to chip, and is not injured by a red heat. Altogether these iron shingles are well adapted for covering roofs, not only from their durability, but also on account of their immunity from fire. They have been found in America to remain uninjured by the fire of a neighbouring building, when a slate roof of another edifice flew to pieces under the intense heat.

Iron Statues.

Very handsome articles, such as vases, fountains, statues, bas-relievos, balconies, fire-grates, and stoves, are now made of cast or wrought iron and steel by the Société Française d'Inoxidation, of the Val d'Osne, near Marseilles. They are coated with a protective layer of bluish-black oxide of iron by subjecting them to a furnace-heat in a current, first of carbonic oxide gas, and then of carbonic acid. On being polished with oil this imperishable bloom takes a beauteous lustre, and it can be further ornamented by scraping away the surface into graceful designs, and inlaying these with an electro-plate of bronze, gold, or platinum.

Cooking by Electricity.

A surprise is in store for the scientific world. An ingenious Frenchman, M. Salignac, fired with the ambition to outdo his fellow-countryman M. Mouchot's feat of cooking food by sunshine, proposes, so it is said, to fit up an electrical cooking-range with the object of providing a variety of dishes cooked by the heat generated from the electric current. That an electric current is capable of producing an intense degree of heat, is of course well known; but whether this heat can be turned to anything like the same practical account as the light, remains yet to be proved.

Moth-Trap for Bee-Hives.

It seems that in certain localities in America moths are the pests of bee-hives, and an ingenious contrivance has been designed to prevent them from obtaining an entrance into the hives. The device is a trap which consists of a box or similar vessel furnished with two tubes, one inside the other, the inner one passing through the box into the hive, the outer leading into the box. The trap is to be placed in front of the aperture of the hive, and it is supposed to secure the moths in the following manner:—The intruder enters the tube, but the inner one being too small for it, it passes by way of the outer one into the box, where it is imprisoned; the bee, on the other hand, readily finds admittance through the smaller tube into its hive. We do not, however, quite see how the trap is to exclude the little moths.

An Electrical Omnibus.

The success of the electric railway at Berlin has been so marked that the line is about to be extended. It is found, however, that horses in crossing the line on the level sometimes get a shock, and one or two accidents have resulted from this cause. The drawback can, however, easily be overcome. The railway, too, is about to be rivalled by an electric omnibus, announced to ply between Zehlendorf and Teltau, Berlin. The electromotor will be carried by the vehicle between the two hind-wheels, and the electric current will be conducted to it by a slender chain in connection with the generators. The distance between the two stations above-mentioned is about four miles, and it is calculated that the omnibus will traverse it in twelve or thirteen minutes. While on this subject we may also mention that M. Trouvé has again been experimenting with the electric boat, which we described in a former note of the GATHERER. According to his latest results, a boat seventeen feet long by four feet across the beam, and carrying three persons besides the electric apparatus, can be propelled by a battery of twelve Wollaston cells, at a speed of four feet per second, or eighty yards a minute. He hopes, however, to improve very considerably on this achievement; and if he succeeds, we may expect that the nuisance of steam-launches on the Upper Thames will ere long be mitigated by electricity.

Kinder-Garten Teachers.

We have received a communication on the above subject (with reference to a paper which appeared in a recent number of this Magazine) from Miss Mary A. Ewart, who asks us to correct the impression formed by some of our readers that she is an Honorary Secretary to any institution for training Kinder-Garten teachers. The office she holds is that of "Honorary Secretary to a Committee for lending fees, without interest, to women students at Cambridge, Oxford, or elsewhere, or to those preparing for any of the University Examinations." Miss Ewart adds: "We do also lend fees to a *limited* number of Kinder-Garten students, but our aim is chiefly to help those who are likely to prove efficient teachers in High Schools and other institutions for the education of girls and women." Miss Ewart's address is 3, Morpeth Terrace, Victoria Street, London, S.W.

Prize Answers to Prize Acrostics.

BY CHARLOTTE P. MITCHELL.

III.

STILL tearful from the misery of the last,
I loosed the third, and ere a second passed,
From out the jar a subtle vapour rose,
Which stealing o'er me made mine eyes to close;
When I in thought beheld two fields of blood,
Hastings and *Edgehill* merged in one. I stood,
In awe and wonder lost, till there did beam
A sweeter picture on my moving dream.
'Twas the sweet vision of my own loved *Home*,
And I was hastening thither through the gloam:
Full was my heart, for floating through the air
 Methought I heard my favourite sister's *Song*;
 For this sweet hour my soul had waited long;
But ah! whose joys are sown without a *Tare?*
Scarce were my feet an *Inch* off home and rest,
When all my bliss is killed within my breast;
For lo! sweet home has faded from my ken,
And I am by far *Ngami's* shore again;
And *Gull*-like on the horizon of my dream
A fast-receding *Sail* afar doth gleam!

IV.

I oped the fourth, and slowly came to view
 Paris the vast; and, rising ever higher,
 Came grand old *Sarum* with its marvellous spire.
In one huge city blent the wondrous two
And then they vanished; but again there came
Paris as if my last adieux to claim.
Then seemed it that in restless mood I passed
From this great city southward, till at last
Through sunny *Andalusia* I roved,
 Where purple grapes hung blushing in the sun,
 And passed before me many a beauteous one
Of Spain's dusk, dark-eyed daughters—girls who moved
So gracefully that, as I looked, I loved!
Yet did I linger not, but, as in pain,
Passed home to *Rochester* across the main.
My soul from all sweet rest was fiercely driven,
For seemed it at my birth that I had given
An *I O U* to Death, and restlessly
Now sought him o'er the wide, wide world, that he
In payment might receive my life from me.
At last, when many wandering years were o'er,
Before old *Sarum* paused my feet once more;
And came a thought that here with peaceful breath
Rest would I, and nor seek, but wait for death.
Then came a voice, "Mortal! most wisely said;
Rest thou!" and at the voice the vision fled.

THE PROBATION OF DOROTHY TRAVERS.

By the Author of "In a Minor Key."

CHAPTER THE THIRTY-SECOND.

ROMAN FEVER.



"I HAD no idea you were back again in Rome. Why did not you send for me before?"

The fierce June sun was streaming down on the Roman paving-stones, white and glistening under its scorching rays. It crept under and through the thick jalousies which shrouded Harry Leonard's windows in his old hotel in the Via Babuino; it shot a ray athwart Geoffrey Ingram's face as he stood talking to his friend, and rested on a white ivory photograph case, which lay closed on the table by Harry's side.

"I only arrived the night before last, and yesterday I was so seedy that I could do nothing all day but eat water-melon; besides, I thought you would have left long ago."

"No; I am quite the last, for I have changed my plans, and am off to the Engadine instead of Frascati directly. You had better come with me; it will be the best thing in the world for you after this climate."

"I should like it of all things, but just now I feel too good-for-nothing to do anything but sit still and doze."

"You have been too long in Italy, Leonard," said Geoffrey gravely; "and if you are in Rome, you ought to be up on the high ground instead of down in this unhealthy street. I have first-rate rooms in my place, waiting for some one to occupy them. Move into them this evening, and I will undertake to look after everything for you."

"You are very kind. This hotel *is* hot; and the cooking!" and Harry made a gesture of disgust.

"Then it shall be done this evening. The heat is terrific just now. Try and take a siesta, and I will be back with you as soon as I can to see to your move."

As Geoffrey went out of the hotel he looked considerably graver than when he had entered it. That Harry Leonard had an attack of Roman fever, or was on the verge of it, was very plain to him, and if he could get him away, it would be the best thing he could do for him. All the English doctors had left Rome, and were scattered to the four quarters of Europe by this time—all but one, who was in *villegiatura* at Frascati—and in the Italian doctors Mr. Ingram, Englishman-like, had no faith.

Notwithstanding the broiling sun, he was soon on horseback, and riding through the Campagna—all yellow and burnt up—towards Frascati, in search of Dr. Campbell. The few Italians he passed, stretched lazily on the grass, looked at him through their long black lashes, and murmuring "*E pazzo; Inglese!*" composed themselves to slumber again. Overhead the sky was unflinchingly blue; look where you would, the same brilliant azure, wearying to the eye, the repletion of colour, till the twelve miles from Rome to Frascati seemed as long as from Rome to Naples.

But it was accomplished at last, and Geoffrey could allow himself an hour at the hospitable doctor's, to rest his horse and refresh himself on slices of cool water-melon and draughts of iced lemonade. Dr. Campbell promised to be with him in the evening, and, with a mind at rest, Mr. Ingram rode back to Rome, to see to Harry's removal.

It was not without reason that he looked so grave over his friend's indisposition. Within the last six weeks there had occurred several bad cases of Roman fever, two or three of which, among the English, had terminated fatally, and it had been but a fortnight ago that he had followed to her grave, under the shadow of the tomb of Caius Cestus, poor, pretty Mrs. Grey, who, not so long before, had been so affronted with Harry for buying the bracelet on which she had set her heart.

The streets were just beginning to wake up as he passed through the Porta San Giovanni, where he had left his horse, and made his way to his friend. Harry was decidedly better. The very sight of Geoffrey had done him good, and safely installed in the Via Sistina, he insisted at first that he was so much improved that he could quite reckon on going to the Engadine in two or three days; but by the time Dr. Campbell arrived he was shivering with aguish pains, and was summarily driven to bed by Geoffrey. With the termination of the physician's visit, the latter had to re-cast his plans. All thought of the Engadine must be given up for the present. It was plain that Harry was on the brink of a bad illness, and, save a few artists, there was hardly an Englishman left in Rome. Between himself, his servant, and Harry's man, the nursing could easily be done; and, if he could help it, the pyramid of Caius Cestus should not cast its shadow on Harry Leonard's grave.

Two or three letters to friends with whom he had intended to travel settled all his part of the business, and then he went in to Harry. It seemed that he had not made his arrangements one moment too soon.

The poor boy was tossing and moaning, whilst his Italian servant, standing by his side, with many an "*Ahimè*" and "*Ohimè*," poured into his ears all the stories that were circulating about Rome on the subject of the ravages wrought by the fever.

Geoffrey dismissed the man, and sending for his own servant, an Englishman, and bidding him prepare a cooling drink, took up his post by Harry's bedside, to watch there till dawn. He had had plenty of experience in nursing at one time and another, and moreover of this particular form of fever, and was at no loss as to what to do; but he wished he knew a little more about Harry's relations, in case he should be so ill as to require that they should be sent for.

With a faint smile of gratitude for the dismissal of the garrulous Antonio, Harry had accepted Geoffrey's presence, and through the first two or three hours of the night there was no sound heard but those which proceeded from his restless tossing and moaning. The short hot summer night brought little chance of rest to the fever-stricken boy, and kept Geoffrey fully employed in satisfying the ceaseless craving for something to drink and the continual wish to have his pillow turned.

Once, when performing this latter service for him, Geoffrey came across something hard, and found it the little ivory photograph case he had vaguely noticed on his friend's table this very day. He was about to remove it, but Harry made a gesture to retain it, and Geoffrey, wondering whose photograph it might contain, restored it to the burning fingers so eagerly stretched out for it.

Towards three o'clock his patient fell into a comparatively quiet slumber, and woke calm and tranquil, after two hours' real rest. It was broad daylight. The hum of voices, which had never ceased through the brief summer night, the cries of the fruit and flower-sellers, seemed to preclude all chance of any more repose, for the Roman population was all astir with the fresh morning hours. Harry turned his face, from which the feverish flush had somewhat died out, to Geoffrey. His voice was calm, even deliberate.

"Ingram, am I dying?"

"No," answered Geoffrey promptly and decidedly; "certainly not."

"I am only beginning, you know—I may die, as Antonio tells me so many of the English have since I have been at Naples. Poor little Mrs. Grey! I am so sorry for her."

"Antonio exaggerates," responded Geoffrey. "The deaths have been very few, the recoveries many. You must not talk of dying, my dear boy; keep up your pluck. Yours is a mild attack, and I have seen hundreds such recover, and quickly too. Dr. Campbell thought nothing of your case."

Geoffrey's words were cheerful, but his heart was heavy. He could not shake off a foreboding that had clung to him all the night—why, he could not tell—that Harry would never rise from his bed alive. But not for the world might his patient know or suspect such a thing. To keep up his courage and a profound faith in his recovery was half the battle, and Geoffrey's words were almost carelessly hopeful, to hide his real feelings.

"But I *must* talk of dying," said Harry, "in case it should go hard with me. If I get worse—much worse I mean—I should like my sister sent for, and—Dolly."

The word "Dolly" had no sooner escaped his lips than, as from a sudden flash of illumination, everything seemed to be made clear to Geoffrey. He knew at once that it was Dolly Travers who was meant, and that this boy who had taken such a hold on his affections was her "Harry." What a curious vagary of fate!

"Yes," he answered quietly; "it shall all be done."

"Oh! but you do not know who Dolly is—I ought to have called her Miss Travers—or my sister's address. I have so much to tell you."

"Not now, Harry," for the first time calling him by his Christian name. "You must keep calm, dear boy."

"Yes, now—now at once; in an hour I may be light-headed—I may never recover my senses. Don't stop me, Ingram."

He was getting so excited that Geoffrey thought it best to let him have his own way, and, with the required permission, Harry commenced at once with what seemed to lie heavily at his heart, the narrative of his engagement to Dolly.

"You see," he said, plunging at once into the midst of the subject, "I have always loved her, ever since she was a tiny mite of three years old, and she always loved me.

"Ah! I forgot—I mean Miss Travers—Dolly Travers, whom you know. We are to be married in about fifteen months' time—at least, we hope so. I asked her to be my wife—she was just seventeen—on the second of October, under the cedar-tree at Holme Regis, and she said 'Yes.' The next day she went away home, and then my father and her father vowed they would not allow the engagement, or that we should see each other, or even write. But we kept true to one another, and agreed that when the storm was past we would become husband and wife. My father died last year; yet, although I am my own master, Sir Augustus still refuses his consent to our marriage, having got hold of some untrue stories about me at Oxford. But Dolly is twenty-one next September twelvemonth, and then I hope and trust we may be married. Do you see?"

Yes, Geoffrey did see: saw it all only too plainly. The slightly confused, misty narrative was to him as clear as daylight, and he wondered how he could have been so blind as not to identify Harry Leonard with Dolly's "Harry" long ago.

"I quite understand," he answered. "Miss Travers told me she was engaged to be married, but I did not know that you were the fortunate man."

"She told you? Why, I thought it was kept a dark secret at Wrangham."

"So it is; but I am an old friend there, so it was revealed to me."

"I wish I had known it. Dolly should have told me. But I must go on. I could not die without seeing her again. You know her—the dearest, sweetest!—but I must not be foolish. I mean you can perhaps guess what she is to me."

"Yes."

"So if I am in danger—but not unless—send for her and Maggie, will you? I made my will in England, and left it with my lawyer, but I wish to mention that all the things I have bought abroad are for Dolly. And—is there anything else? Oh! yes—a sheet of paper. I must write one line to Maggie. Will you give it to her yourself if I die? it is very important."

"I will. Here is the paper and a pencil."

"No; a pen, please. I think it ought to be written very clearly, as it is really of great importance."

Geoffrey humoured him, propped him up in bed, and gave him pen and ink, and with trembling fingers, in scrawling uncertain letters, Harry wrote his note to Maggie. It was not long, but, as he said, very important. Yet one more letter for Dolly, and then he leant back on his pillows, with a smile of contentment on his face.

"I do not mean at all that I am going to die, Geoffrey," he said. "You need not fear but what I will fight for my life, for I have plenty to live for; but it is just as well to provide for what may happen. Now I will give you Maggie's address. She is just now at Dinant."

Geoffrey wrote down the direction.

"Miss Travers is in London, in Lowndes Square;" and he gave the number, which his friend already knew.

"And you have no other relations?"

"No, none but the aunt Maggie lives with; at least, I know of no others, though we must have some somewhere in Derbyshire, where my father sprang from, but we are absolutely ignorant of them."

"And now, Harry, no more talking. I promise you faithfully to obey every direction to the very letter, so rest contented, and try and sleep again."

Easier said than done. Once set off on the subject of which his heart was full, what could Harry do but talk of Dolly, his wife that was to be? And Geoffrey listened, his thoughts wandering off to his own recollections of her, and ever and anon coming back with wonder to the fact that they two, he and Harry Leonard, the two men who loved Dolly with a deep true love, should, out of the number of Englishmen that thronged the Continent, have been thrown together in these intimate relations.

And Harry, in short broken sentences, continued to talk on, revealing with every word—as, with the spectre of death before his eyes, he laid bare his every thought and wish to Geoffrey—a simple childlike soul that the latter found it in his heart to envy.

From his babyhood, Harry's character had been a singularly simple one. Free from all pettiness, from all longing for what he did not possess, almost, one may say, from all aspirations, he was contented to go on pretty well the same road in manhood as in youth. To him had never come the faintest shadow of those doubts and perplexities, those struggles, those graspings after the higher realities of life and truth which come to greater, more imaginative souls. His prosaic nature found all that he needed in his own circumstances. His mental vision was not extensive, but it was true. What he had been taught as a child he had retained with a childlike simplicity, never having deviated one hair's breadth from it. This boy, accused by Sir Augustus of a wild career at Oxford, would no more have dreamt of not going to church any Sunday of his life than he would have dreamt of robbing his neighbour; and throughout it was the same thing. Self-analysis and introspection he knew not; it was no part of his nature to dwell on self. One article of faith he held: that he was exceedingly stupid; but it did not trouble him much, except in so far as he considered it rendered him no fit husband for Dolly. Any spark of romance, any ray of poetry that lay dormant in him, had been called into life by his love for her, and had kindled that one aspiration of trying to make himself intellectually her equal.

And now, as he lay contemplating death, there spoke out of every one of his words a humble trust, a quiet faith, that caused Geoffrey to stand in wonder before his boyish friend. Truly, he thought, Dolly had chosen well, not knowing or guessing that, unwittingly to herself, the very simplicity of Harry's character had been the stumbling-block to her complete love for him. There had always been a something wanting, and with Geoffrey there had been let in on her a glimpse of perfect union of thought and mind. She could give Harry sympathy in all his amusements, because she had many sides to her character; but his was, as it were, a perfectly even surface, on which it was difficult to make fresh impressions, and which could therefore deal out love, and not sympathy.

Even as a child, Dolly had learnt that it was no good talking to Harry about the books she read, or trying to speculate with him on the past history of all the old Ingrams who adorned the walls of his home; yet she would watch with him for hours beside an ant-hill or a wasp's nest, taking in with bright eager attention all his instructions in natural history, to go home and ask Mr. Bruce innumerable questions on the same subject. All this she felt even more as they grew older together, and she—one by herself, and therefore much addicted to speculation, day-dreaming, and meditations—ceased to propound the many questions that crowded her young mind to Harry, and remained content with Uncle Tom, who always listened so patiently, seemed as much interested in them as she was, and answered so wisely.

Having unburthened his mind of his secret seemed to have done Harry good, for he was decidedly better. Geoffrey had always liked him, indeed had taken a fancy to him from the very beginning of their acquaintance; why, he could not say, for they had not very many ideas in common; but now, as Dolly's betrothed, he seemed to him a sacred charge in trust for her. He was his rival, but with a prior claim of many years' standing. Jealousy he felt none, but considerable envy of this favourite of fortune, whose home was cast in the inheritance of his own forefathers, whose wife was to be the woman he loved. It was hard to hear him talk of Dolly as so entirely his—"My Dolly," "She will be my wife"—and assent to it all. It made him

feel how utterly and entirely she was lost to him, and a sense of desolation and bitterness fell on him, which had the effect of redoubling his attentions to Harry, whilst he trusted that he might not have to send for her to this fever-stricken spot in high summer.

When Dr. Campbell arrived, Harry was again fast asleep, and breathing quietly and calmly.

"He will do now, I think," said the doctor, after watching the patient for some time.

"Thank God!" answered Geoffrey.

CHAPTER THE THIRTY-THIRD.

IN LONDON.

LONDON had done Dolly good. She needed rousing, and town life in the height of the season was certainly calculated to exercise that effect on her. No sooner had she arrived than she found herself called in a thousand different directions by her stepmother, by Rose, by Lou, all so busy that they were thankful to have a supernumerary in the house to supplement them.

No one treated her as an invalid, and but few inquiries were made after her health. Lady Travers, as we know, had the knack of taking for granted that which she wished, and in this instance she took for granted that Dolly was perfectly well. Immediately on her arrival, after greeting her affectionately, and gently scolding her for still wearing deep mourning, saying it was inconsiderate to Rose, she set her down to write half a dozen letters to friends and tradespeople, and to arrange some flowers.

Dolly's glimpse of Joan, therefore, had been very brief, and she had had no time to talk over anything with her cousin, except a few common-places respecting her illness. She had thought Joan looking much better, calmer, and happier than when she had last seen her, and she was not in the least surprised to hear of the Orminster scheme. But with the advent of Lady Travers all such quiet talk had come to an end, just as the two cousins were about to embark on a subject which would have cleared up many a misunderstanding between them.

For Dolly had come home resolved to put an end to any further dissimulation on her part, and, availing herself of Lady Travers' betrayal of the secret of her engagement to Geoffrey, to make it known, at any rate to those who had a right to judge of her conduct. Further, she intended trying a last fight for her marriage with Harry, on the plea that Rose's was not only sanctioned, but highly approved, and therefore what objection could there be to hers?

All this had been passing in her head as she steamed up to London, and she arrived in Lowndes Square with a very resolute countenance, which quickly melted before her stepmother's words of welcome. There was something in Lady Travers' most amiable manner which was more subduing than severe reproofs, and Dolly instinctively felt that she was rather in disgrace for having been ill. But she was allowed no time for feelings. She begged to go and find Rose, but was told that her sister would come to her; and, after waiting half an hour, during which time she completed the letters, there arrived an influx of Lord Marsland's relatives to make acquaintance with the bride-elect.

So, after all, she first saw Rose in company with the room full of people. Lord Marsland himself did not appear. He was apparently not fond of his relations, and he seized this opportunity to vanish. Dolly was struck by the extreme effusiveness of the welcome accorded to Rose by these new relations. It seemed almost as though they were thanking her for consenting to marry their desirable young nephew, whose titles covered half a page of the Peerage, and whose estates stretched over the greater part of two counties. Not one quiet moment could she get with her sister till they went to dress for dinner, and then they were both late, and had to hurry into their smart dresses, for they were expecting friends.

And Rose purposely seemed to avoid congratulations or questions, for she called Lou into her room, and made her show Dolly the presents Lord Marsland had already given her, and then dismissed them both with that new little air of patronage that she had acquired with the prospective dignity of Countessship before her.

At dinner-time Dolly was re-introduced to her future brother-in-law, who told her that she looked like a ghost. Rose did not quite approve when he further whispered to her that her sister was charming, and he should like to tell her so, but that she had snubbed him so cruelly at Wrangham when he paid her some trifling compliment that he felt afraid to do so.

"Then don't do it," said Rose impatiently; "do be sensible." And thus admonished, Lord Marsland sat upright in his chair for the space of two minutes, and wondered why Rose looked older than Dolly, which had caused him to make the mistake of taking her for the eldest.

Such a long, hot dinner, in spite of open windows and ice. Dolly felt her little strength ebbing away with every course, and her next-door neighbour, who had been kindly putting her *au courant* of the gossip of the season, began to feel rather uneasy as to whether she intended to faint or not. She guessed his perplexity, and re-assured him on the subject, telling him she had been ill, and felt the heat very much, but was not addicted to fainting.

He was an amiable, would-be *blasé* youth, of about twenty-one, one of Lord Marsland's brother officers, who was under the impression that he was thoroughly used up, and was exceedingly proud of it. As a matter of fact, he was a good-natured boy, with a large fortune, that he was dissipating as fast as time would allow him, but enjoying life very fairly at present. Dolly's brown eyes and smile went far to captivate him, and he entreated her pathetically to come and see him play polo the following week.

And Lady Travers, whose eyes and ears were everywhere, although apparently entirely given to the rather deaf old man who had taken her in to dinner, arrived at the conclusion that nothing short of shutting

Dolly up would keep her from marrying some one or other, and that it was most annoying of her not to have inherited her mother's plain, uninteresting features; while, on the other hand, she was not too well pleased to remark that Rose and her *fiancé* had very little to say to each other, and that both looked bored.

This was but a beginning of what was to follow. From morning till night there was always something going on, and although it roused Dolly from her depression, it threw her back in bodily health, which prevented her enjoying it as she might otherwise have done. She managed, however, an interview with her



"SHE MADE HER SHOW DOLLY THE PRESENTS" (*p.* 580).

The dinner came to an end, however, and Dolly, feeling more dead than alive, crept up-stairs in the rear of the ladies. And here her old friend Lady Mary Baillie interposed in her behalf, and appealed to Lady Travers to send her to bed, which her step-mother was nothing loth to do.

So when Mr. Melville came up-stairs he was disappointed to find that the pretty Miss Travers had disappeared, and that her place had been taken by the unfascinating Lou,

father, which terminated, as usual, in her signal defeat.

She was perfectly respectful and dutiful, but advanced her claim to be allowed to marry as well as her sister. Sir Augustus' speech in answer was a model of elocution. The fine contempt with which he spoke of the Leonard family, contrasting their origin with the blue blood of the Marslands, and digressing to a short sketch of the latter noble race, beginning somewhere in the time of the Crusades, and ending

with his future son-in-law, was inimitable; but when he returned to the old story of Harry's vices, Dolly was prepared to refute him. Mr. Bruce had made every inquiry, and had found that the afore-mentioned vices were of a venial description, incidental to the career of many young men at Oxford, yet not sufficient in any way to spoil their after-life.

Sir Augustus was, for the moment, taken aback, but he quickly recovered himself and his pomposity.

"He was much obliged to Mr. Bruce, but he hoped he was competent to manage his daughter's affairs himself. Unhappily, what he had heard of Harry was but too true;" and, with a majestic wave of his hand, he closed the interview, saying he had long ago given Dolly his ultimatum.

With a burning sense of injustice she left the room to write to Joan, and encountered her stepmother to whom she poured out her grief.

Lady Travers would have alleged business, but she saw at once that her stepdaughter was in that frame of mind that required soothing. She was considerably taken aback when Dolly announced to her that, as she fully intended marrying Harry sooner or later—though she trusted it might be with her father's sanction—she should make her engagement public, and at once communicate it to her sisters and brothers. It was a case for those blandishments no one knew better how to lavish than Lady Travers. She professed the deepest sympathy for Dolly, assured her that she had always been her friend, and had tried her best to persuade Sir Augustus to allow the marriage, although she was obliged to confess that the charges brought against Harry were such as to warrant any father objecting to the engagement.

For a moment Dolly felt staggered. What if her father had indeed been acting for the best all along?

"But what are these charges?" she cried, and could see a faint smile creep over Lady Travers' face as she responded—

"Don't ask me, dear child; I could not tell you," which was perfectly true. "But," she continued, "if you will consent to be wise and dutiful, and not mention your secret—which would make your father exceedingly angry—to any one, I will do my best for you. Once make your engagement public, and I doubt if your father will ever forgive you. He will certainly not allow any marriage from his house; but if you are gentle and obedient for the next three months, he may yet be won over."

"I am so sick of dissimulation," responded Dolly.

"No need to dissimulate, my dear. Only behave naturally and simply, as an engaged girl should do, not seeking admiration or attention, and if you go to balls, not dancing more than once with the same man, and I assure you no one will take any notice of you, or seek to know if you are engaged or not. When Rose is married, and your father has time to think, I am certain all will come right; but on no account reveal your secret, for by so doing you, to a certain degree, try to force him to a consent, and that he will never stand."

Dolly thought she saw wisdom in this advice, and resolved to keep quiet for the present—at any rate until Rose was married, at the end of next month; and meanwhile she would continue to do, what she had been doing for the last three years almost—to wait.

Lady Travers had gained her object—time; and for the present that was all she wanted. This brilliant marriage of Rose's was not quite so glittering as it seemed, and occasionally her better nature would keep her awake at nights pondering on whether she had indeed acted a mother's part to her favourite child. But it was all settled and arranged now, and could not be undone. With marriage she persuaded herself would come reformation, and meanwhile she was gaining a moral ascendency over the weak, peevish youth, which would come in usefully when Rose was his wife.

And Rose herself? She was in high spirits, driving most days of the week with her betrothed on the box-seat of his drag, where her brilliant beauty showed to the greatest advantage, enduring with a bravery worthy of a better cause agonies of terror lest she, her Jehu, and the four horses, who seemed rather more than Lord Marsland could manage, should end in a fatal upset. But whatever her *fiancé's* vices might be, rashness was not one of them, and he was careful to choose a route conspicuous for absence of all danger, and having chosen it, to keep to it. Once or twice Dolly acompanied them, thoroughly enjoying the exalted position, and, free from all fear, looking about her, and talking, to Rose's amazement.

But the conversation she sought with her sister never came off. They were not five minutes alone without interruption: whether it was by design or by accident Dolly could not tell. The subject of her engagement was apparently distasteful to Rose, for whenever it was approached she contrived to change the conversation at once. Nevertheless, she seemed extremely happy, enjoying the presents, the trousseau, the diamonds, laces, and furs with a dignified urbanity worthy of her mother. With Lord Marsland her manner was all that could be desired, and Dolly delightedly arrived at the conclusion that she had been mistaken, and that her sister was really marrying for love, though how she had ever contracted such a feeling for such a man was more than she could comprehend.

That Geoffrey Ingram's name should crop up from time to time in conversation was not to be wondered at. He had been one of the first to send Rose a present, a beautiful parure in Roman gold, copied exactly from an Etruscan model, lately discovered, which had created quite a furore in Rome, and perfect both as to design and workmanship. Many of his numerous relations too were in London, of whom some were acquainted with the Travers', so naturally it came about that he was not forgotten. But whenever he was mentioned, Lord Marsland seized the opportunity to raise his voice against him. As *les absents ont toujours tort*, no one took the trouble to defend him except Lou; and although Dolly would fain have joined her, she deemed it wiser to ignore her future brother-in-law's abuse of a man so infinitely his superior.

So the days flew by, and June succeeded May, and at the beginning of July, Rose was to be married. But the light had not come back to Dolly's eye or the colour to her cheek, nor had the struggle quite ceased: that is to say, she never for one moment surrendered; but there would flash across her glimpses of such happiness as might never be hers, sending her in spirit in tears of penitence to Harry's feet. And unfortunately she could not forget. In the daytime she had really too much to do to have time to remember; but at night, too tired to sleep, all the scenes, all the conversations of this last winter would recur to her memory, and keep her awake, till at last she would fall into an uneasy slumber, only to dream of Geoffrey and Ferdie. It was not the best way to recover her strength, but youth and a good constitution asserted themselves in spite of these adverse circumstances, and she found herself with the bright summer weather gradually—very gradually—but yet surely, recovering in a slight degree her elasticity of step, her appetite, and, in fitful gleams, her spirits.

CHAPTER THE THIRTY-FOURTH.

TELEGRAMS.

"A TELEGRAM for Miss Travers, my lady."

Lady Travers had just stepped out of her carriage, and was looking over the cards that had been left for her whilst she was out driving, when Graves, the butler, approached her with the well-known brown envelope, of such common occurrence in the present day that it excites no emotion beyond a passing wonder.

"For Rose, I suppose," she murmured, as she deliberately proceeded to open it, and remained mute with surprise and astonishment as she read the heading, "From Geoffrey Ingram to Dorothy Travers."

Underneath was written, "Harry Leonard is dying. Come at once if you wish to see him alive. Will telegraph again, so that you should get it before you leave."

Harry Leonard dying! Lady Travers could hardly believe her eyes. And the message sent by Geoffrey Ingram!

What a curious combination of circumstances, and, at the same time, how extremely annoying! How fortunate that Dolly was well out of the way, spending the day at Chislehurst with an old Holme Regis friend! It gave her stepmother time to reflect and to arrange her plans.

For Lady Travers always made plans. Never by any chance did she act on the impulse of the moment. Every word, every act was weighed and considered, and given forth to the world well polished—sometimes, if it suited her purpose, with affected impulse, but never without all due reflection.

This telegram furnished much food for thought, and was in the highest degree disturbing. That Dolly should depart at a moment's notice for Rome was not to be thought of. She could not go alone, and no one could be spared to accompany her. The idea was out of the question. Besides, Sir Augustus disapproved of the engagement altogether, indeed absolutely refused to acknowledge it, therefore Dolly could not possibly be allowed to see the last of a man who, had he lived, would never have been permitted to marry her. And Harry was not the only person to be considered.

Apparently in close attendance on him was Geoffrey Ingram, a far more dangerous man than poor, simple Harry Leonard. What opportunities for sympathy, for condolence, and later on for advancing his own pretensions, would Harry's death afford him! and he could never be held at bay, as had been his less formidable rival. It was indeed a case of Scylla and Charybdis, and even Lady Travers did not see her way just now. The only thing she could think of to do was to wait and see what the next telegram would bring forth.

So she pocketed the missive, and ordered tea; and whilst sipping her favourite beverage, wondered what evil genius had brought about a combination of Geoffrey Ingram and Harry Leonard. There was no possibility of deceiving the former. Those deep-set eyes of his had long ago fathomed her, Sir Augustus, the whole family. His will was stronger than hers, and in many a little skirmish that they had had he had invariably come off victor. And as she sat and ruminated, with her tea-cup in her hand, she sighed heavily, and the sigh was not altogether given to the complication that had suddenly arisen. Perhaps she was thinking of days long gone by, and that if she had had for her husband such a man as Geoffrey Ingram, she might have been a different woman. Perhaps her thoughts had flown to the future married life of Rose and Lord Marsland; but whatever they might be, she had not much time to dwell on them, for all at once the door opened gently, and Dolly came in.

"Graves tells me there is a telegram for me, mamma, and that you have got it," she said.

Lady Travers had not been prepared for this question; in fact, she thought she had given Graves to understand that the telegram had been for Rose. But she was equal to the occasion.

"Not for you, dear," she responded, though with a slight nervous hesitation, which escaped her daughter's notice. "It is for Rose."

"Nothing alarming, I hope."

"Oh! not in the least; it is not of the slightest consequence. Have a cup of tea, and tell me how you have enjoyed your day."

Dolly gave an account of her visit, and Lady Travers in her turn related the events of the afternoon, and described the fresh presents that had been sent to Rose.

There was to be a dinner-party in Lowndes Square that evening, and the arrival of a second telegram might prove awkward. Under these circumstances her stepmother became tenderly solicitous for Dolly's health, and finished by decreeing that she was not to appear at dinner, but to retire to rest in good time, as the day at Chislehurst had been quite sufficient dissipation for her.

Dolly, perfectly aware that there must be some motive for the order, acquiesced willingly enough, as the long hot day had indeed tired her considerably,

and, all unconscious of the momentous words that were all the while reposing at the bottom of Lady Travers' pocket, she sat down to write invitations to an evening party that was to come off shortly, with a formidable visiting list in front of her.

herself that "mother was not quite so much as usual that combination of dignity and repose she so strongly advocated;" and, in truth, Lady Travers was not quite herself. She talked more than usual, but with less grace; her pale blue eyes roved restlessly, even



"'GRAVES TELLS ME THERE IS A TELEGRAM FOR ME, MAMMA'" (*p.* 583).

Uneasy in her presence, her stepmother left the room, and retired up-stairs to meditate yet further on what an hour might bring forth.

The dinner-party that evening was one of great importance, some of the guests being Lord Marsland's most influential relations, and it was quite necessary that it should go off well, without hitch or *contretemps*.

Never had Lady Travers looked more brilliant, or Rose handsomer. The former was, as usual, the perfection of a hostess; but her daughter remarked to

nervously, about the room; and, with every ring of the bell, turned questioningly to the door.

But dinner came to an end, and still there was no telegram; and towards its close she began to eat and drink, and to hope that all would go well. Once safely established with the ladies in the drawing-room, she felt able to face anything that might occur, unconsciously acknowledging to herself what a relief it was that Dolly's honest eyes, grown somehow so pathetic since Ferdie's death, were not present,

There was plenty to talk about up-stairs. Rose, her trousseau, her presents, her wedding, were a never-ending theme; and the heroine herself had no foolish objections to being the one subject of conversation, but thought it only natural and right that it should be so.

So the hours sped by, and the guests were beginning to disperse to concerts, to balls, to evening parties; and Lady Travers was by no means unwilling to speed their departure, for she and Rose, and Lord Marsland, who detested music, had no less than two concerts on their list for to-night. If only that dreadful telegram would either not come, or contain good news, there might be some prospect of enjoyment for them all.

A ring at the door-bell made her start and shiver; but she had still two or three couples on her hands, and must not give way to her curiosity. Rose had slipped up-stairs to put on her opera-cloak, and she was listening patiently to a rather wearisome account of a long illness that one of her friends had lately gone through, when Graves advanced into the room, and handed to her a second telegram. This time it was directed to her. Perhaps it was not from Rome after all.

Her inclination was to leave it unopened till such time as she was alone; but her friends begged her on no account to consider them, and reluctantly she broke open the envelope.

"Harry Leonard is dead. He died almost suddenly, and quite calmly, this morning. Break it gently to Miss Travers. I will write to her all particulars."

She felt herself grow pale as she read and re-read these few words. But the eyes of her guests were upon her, and, recovering herself, she looked up with that conventional smile that had become second nature to her. Crunching the telegram in her long fingers, she said, with a little laugh—

"Nothing very important. Fortunately, I am so accustomed to telegrams that I think very little of them. Marsland never writes: he always telegraphs; and when he is away, Rose receives about three a day from him;" and, with this explanation, the few lingering guests rose to depart; and Lady Travers was at length alone with her husband. Should she tell Dolly the news to-night, or wait till the next morning? She felt sincerely sorry for her stepdaughter, and thought she might as well enjoy a good night's rest, besides allowing Rose to go to her concerts without any qualms of conscience. Poor Harry was dead! Nothing could be done for him. With morning light would come counsel. Meanwhile, not even Sir Augustus should participate in the secret. On her shoulders alone should rest the responsibility of silence for to-night; and if she could not bear the burden without incurring blame, she was not the clever woman she took herself to be.

"Come, Marsland," she said, in her most cheerful voice, to her future son-in-law, who was reclining on a sofa in the back drawing-room; "the carriage is here."

"Won't you really let me off?" he asked, with a yawn. "I do hate those ——"

But Lady Travers held up a warning finger.

"Those *horrid* concerts! Is that expression sufficiently lady-like to suit your ladyship?"

Lady Travers laughed. She was too wise to draw the curb too tightly.

"You are a bad boy, Marsland," she said; "but I suppose I must spoil you just this once. You need only show yourself at the Baillies, and then you can slip away. Poor Rose will be terribly disappointed; but you and she must settle that between you. Ah! here she is! Rose, my child, the carriage is here. We have only been waiting for you."

END OF CHAPTER THE THIRTY-FOURTH.

THE LONG VACATION AT CAMBRIDGE.



ONE of the heaviest charges frequently made against the University system of our day, is that the amount of advantage obtained from the University is not in proportion to the expense of University life. It is argued that since College life costs on the average, to undergraduates, about £200 per annum, a very substantial quantity, as well as a very high quality of instruction may reasonably be demanded. Undoubtedly the complaint is not altogether groundless. The Academical year is divided into three terms at Cambridge, and four at Oxford. At Oxford, however, though at first sight it would appear that four terms must necessarily contain more than three, such is not really the case, for, owing to the regulations as to the mode of "keeping" terms there, the actual length of residence during the year is very nearly the same at both Universities. At Cambridge, although the number of weeks during which residence must be kept is the same in all years, the dates of the commencement and end of two of the three terms are variable. The Michaelmas or October Term begins on the 1st of October, and ends on the 16th of December. Lent or January Term begins on the 13th of January, and ends on the Friday before Palm Sunday. Easter or Midsummer Term begins on the Friday after Easter Day, and ends on the Friday after Commencement Day, which

is always the last Tuesday but one in June. Thus the official University terms comprise about thirty-three weeks in the year. But to obtain a degree it is not necessary to reside throughout the whole of the official terms. The Statutes of the University only require that an undergraduate shall be in residence during two-thirds of each term, and hence a custom has arisen in many Colleges of only permitting the students to remain in Cambridge during the two-thirds of the term required by the University; and, on an average, an undergraduate is not compelled to reside during more than twenty-four weeks in the year. Should he wish to remain longer in residence, he will generally require special permission from the Tutor and Dean of his College; and this is not usually accorded unless some particular reason can be shown for granting it.

Hence it happens that the very large majority of Cambridge men have more than half of each year on their hands. Men who are filled with an enthusiasm for sports, or other amusements, to the exclusion of any very great desire for the elements of sound learning, naturally find such an arrangement far from disagreeable; but to those whose success at the University is a matter of some importance, it is found to be a serious loss to be deprived during so large a portion of the year of the ordinary means of acquiring knowledge. For the convenience of such students, a custom has arisen of allowing undergraduates who are understood to be reading for Honours to remain in Cambridge during two of the four months which comprise the usual Summer or "Long" Vacation.

It must be remembered that the authorities of each College have absolute power to refuse permission to reside, or to cut short the residence of any undergraduate at any time; and as most of the Fellows of Colleges are themselves absent during the Long, the domestic regulations are more strict than in ordinary term time. At the same time the University regulations are not in force, so that the abnormal stringency of the College rules is compensated to some extent by the unusual laxity of the University rules. Thus, in term, it is not considered a serious offence for a man to be out of his rooms from ten to twelve in the evening; but in the Long, such a proceeding would be sure at most Colleges to be noticed by the Dean of the College; while, on the other hand, during term time the University requires that after sunset on week-days, and during the whole of Sundays, undergraduate members of the University shall not appear in the town unless clad in the Academical cap and gown; but during the Long, no such distinctive dress is insisted on.

Of course there are no University lectures during the Vacation, nor as a rule are any courses delivered by the College authorities, but it is nevertheless generally found to be the most favourable time in the whole year for quiet study. There are none of the distracting excitements of term time; fewer men are in residence, and those who remain are there for the purpose of study rather than amusement. Moreover, although the University and College Lecturers are gently vegetating in a studious repose, or actively engaged in the acquisition of fresh stores of learning, another class of instructors is energetically occupied in imparting information to the undergraduate mind.

Few men who hope to attain any position of distinction in the Tripos list, trust only to the advantage they may be able to glean from the regular courses of lectures. The usual practice with such men is to obtain the services of a private tutor in addition to the lectures they attend. This is of course an expensive system, but it is one that is almost universally adopted, and is indeed rendered absolutely necessary by the very high standard which an Honours man must reach. In lecturing to a large number of men, it is impossible for the lecturer to pay much attention to the requirements of individuals, who must therefore seek more particular instruction elsewhere, if they desire it. Hence has arisen the practice of "coaching." The Coaches are generally the most able men in their own branch of study; and the Fellow of a College who has once established a reputation for having the qualities of a good coach, speedily attracts the most promising undergraduates for his pupils. An instance of this is seen in the fact that the Senior Wrangler of this year was the twenty-second Senior Wrangler who had attained that proud pre-eminence by the assistance of the same well-known Coach. During the Long Vacation, coaching is carried on as in term, and at some Colleges it is one of the conditions of vacation residence that the undergraduate must be reading with some private tutor. Thus, although the usual modes of instruction are in abeyance, a great deal of good work may be and is, accomplished in the course of the summer months.

But in addition to the utility of residence, a Long Vacation spent at the "seat of learning" is certainly one of the pleasantest portions of a University career. In the first place, it embraces the best of the summer months, commencing early in July and ending with August, and although Cambridge may not be the most charming of summer abodes, it may easily be made very enjoyable. In most Colleges the different athletic clubs are not at work, but in their place "Long Vacation Clubs" are formed, and as there are but few devotees to each sport in residence, every one belongs to everything. Cricket is naturally the great amusement, and intercollegiate matches are arranged, at which, if the play is not so scientific as it sometimes is, the jollity is by no means lessened by the appalling performances of the "tail" men. Lawn tennis also obtains a very fair share of attention, and becomes unusually popular from the fact that the permission of the "Dons" is generally given to play even on that sacred territory, the College "Quad." During term, the lawns which adorn most of the ancient quadrangles are held inviolable, no undergraduate foot being permitted to tread thereon without rendering the owner liable to a fine; but in the Long, the grass is no longer so carefully preserved, and in hot weather easy chairs and tables make their appearance in shady spots, much to the benefit of the occupants. In the boating world, the chief event is the College servants' races. These are conducted on the same plan as the better-known May races among the members of the Colleges,

and are contested with scarcely less zeal and enthusiasm. It is said that on one occasion a worthy paterfamilias journeyed to Cambridge during the May Term, to introduce the scion of his house to the venerable Master of the College which in former years he himself had graced. On arriving at the gate, he was surprised to find the porter's lodge in charge of one small urchin.

"Is the Master at home?" asked the parent. "No, sir," was the reply.

"Is the Tutor in his rooms?" "No, sir."

"Is the Dean at home?" "No, sir."

"Well, then, is the Bursar or any other of the Fellows in the College?" "No, sir," said the imperturbable child, "and the porter's gone out too; there's only me left."

"Goodness me! where have they gone?" exclaimed the bewildered old gentleman.

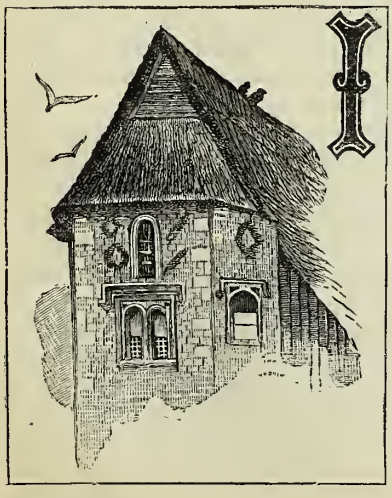
"All gone to the river, to see the races, sir," answered the boy.

Whether so great excitement is a usual occurrence even in the May week may perhaps be doubted, and it would certainly be abnormal on the occasion of a Long Vacation race, but the amusements of the period are nevertheless not without considerable interest. A few years since, an eccentric Don offered a series of prizes to the ancient dames who performed the duties of bed-makers at one of the Colleges. They were to be competed for in the largest of the Quads, and at the time appointed the greatest merriment was occasioned by the spectacle of several of the bed-makers, all of them well advanced in years, and normally of a grave demeanour, contending with zeal in foot-races round the gravelled walks. But this was an event which does not come into the ordinary curriculum of the Long.

Besides sports, the Long Vacation Debating Society is an institution which is frequently productive of a good deal of amusement. In the ordinary College Debating Societies during the term, speeches are made only by those who wish to exercise their powers of oratory; but in the Long, the number of voluntary speakers is of course reduced, and it is frequently made obligatory for every member to speak in his turn, whatever may be the subject of debate. Maiden speeches are then accomplished, and though in some cases the compulsory commencement leads to performances of greater value, in others the confusion of ideas, and still more of language, is sometimes distressing, but more often amusing. At an Exeter Hall meeting a few years ago, considerable interruption was caused by an individual who persisted in moving an amendment which had been ruled out of order. The audience tried in vain to howl him down; he was not to be quenched until the chairman, appreciating the situation, quietly said, "Gentlemen, if you will remain silent, and allow this person to hear his own voice, we shall have no further trouble." The advice was followed, and the amendment was heard of no more. The same trepidation not unfrequently overcomes a would-be orator in a College Debating Society, but as every one present has been, or may be the next minute, in a similar plight himself, the failure as well as the hilarity it causes are taken in equally good part.

Such, then, are the studies and amusements of the Long Vacation at Cambridge. It has been suggested, and forcibly urged, that it is advisable to form the Long Vacation into a fourth term. That is a question on which much may be said on both sides, but it is at any rate clear that a man who is disposed to employ his time to the best advantage, is not compelled to pass the four months of the Long in idleness.

A HOLIDAY VISIT TO OTFORD.



IN the beautiful valley of Holmsdale, about two miles from Sevenoaks, is one of the most ancient and picturesque villages in Kent. But its antiquity, and the beauty of its situation in the centre of a circle of hills which bound a delightful landscape, are not its only attractions, for owing to the absence of convenient railway accommodation, it retains an unusual quaintness and rusticity. Many of its inhabitants have never made a journey to London, although the metropolis is but twenty-two miles distant, while the few strangers who find their way into the village are chiefly artists who come upon it in their peregrinations, or natives who have emigrated to other places.

The village is called Otford. In olden times it was known as Otter Ford, Otteford, and Ottenford—the last two appellations frequently appearing in ancient documents; but the true etymology of the word is believed to be, "At the Ford," Otford probably being a favourite place for crossing the narrow winding stream of the Darenth upon which it is situated, in the days of the Saxons.

The first mention of Otford in history is in connection with the powerful and victorious Offa, King of Mercia. Offa was fond of warfare, and did not shrink from shedding blood; but his conscience always reproved his behaviour, and induced him to make munificent gifts to the Church by way of atone-

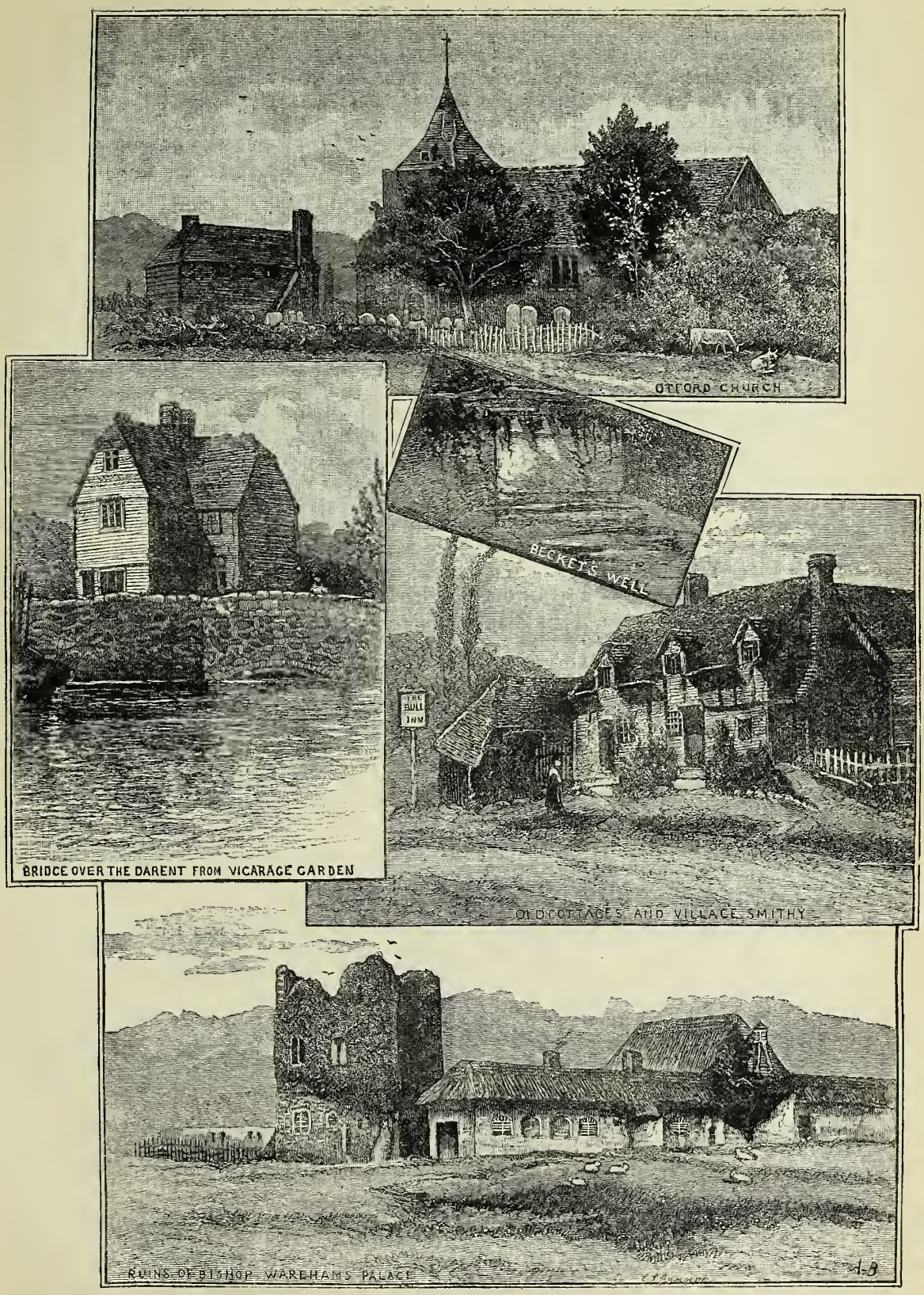
ment. He bestowed lands upon Hereford Cathedral, and founded the Abbey of St. Albans, with many other monasteries. Nevertheless, William of Malmesbury tells us, "rebellious against God, he endeavoured to remove the archiepiscopal see, formerly settled at Canterbury, to Lichfield; envying, forsooth, the men of Kent the dignity of the archbishopric." His hatred of the Kentish people was intense, and he took every opportunity of annoying them. At last he found an excuse for open war, and struck the deathblow to the Kingdom of Kent in a battle fought at Otford. The King of Kent was made prisoner, and some say he was carried by his conqueror to Mercia. This, however, is disputed; and there is also a difference as to which of the Kings of Kent Offa conquered, but he is most generally believed to be Edbrith, surnamed Pren. After his victory, Offa adopted his usual mode of penance for the blood he had shed. He granted Otford to the church of Canterbury as pasture—so it is expressed in the official document—for the bishop's hogs. Later on, in 1016, Otford was again the scene of a terrible conflict. Edmund, surnamed Ironside, passing the river Thames with his army, marched after Canute, the Danish king, through Surrey into Kent, and encountering the Danes at Otford made a great slaughter of them. The fields around bear evidence to the fury of the battle. Innumerable bones have been turned up by the plough; and when the turnpike road, which leads from Eynsford through Otford to Sevenoaks, was widened in 1767, many skeletons were found in the chalk cliffs on each side of it. Skeletons, with weapons lying near them, were also discovered when the cutting for a line of railway, belonging to the South-Eastern Company, was made in the neighbourhood.

The gift of Offa was the beginning of a connection between Otford and Canterbury, which continued until the Reformation. In the ninth century a powerful priest, who was a relation of Wilfred, Archbishop of Canterbury, got Otford into his possession; but the archbishop commanded him to restore it by will to its proper owners, the archbishop and monks of Canterbury, who lived together, and had all things in common.

There does not seem to have been any change in the ownership of Otford until after the Norman Conquest, when Lanfranc, an Italian archbishop, introduced different customs from those that had hitherto prevailed in England. He did not wish to live with the monks, and, consequently, there was a division of the property. Otford was apportioned to the archbishop; and in the survey of Domesday it is said that he held it "in demesne." It is described as being taxed at eight "sulings." Of arable land there appear to have been forty-two carucates—a carucate being as much as a team of horses could plough; a hundred and one "villeins" and eighteen "borderers" having forty-five carucates. It is also said that there were eight servants and six mills of seventy-two shillings, with fifty acres of meadow and wood for the pannage of a hundred and fifty hogs.

It is not known when the first house for the accommodation of the archbishop was built in Otford, but it comes into prominence as a favourite residence of Thomas Becket in the twelfth century. Probably there was a manor-house erected before his time, but we cannot find any mention of it. When Becket was quite a young man, the Archbishop of Canterbury, finding he was "a youth of uncommon parts," and being captivated with his graceful and winning address, gave him the livings of St. Mary-le-Strand and Otteford in Kent. After his accession to the See of Canterbury, he seems to have recollected his first country living with some affection, for some records run as if the earliest archiepiscopal residence in Otford was built by him; and many traditions of the saint are yet to be found in the village. The place, it is said, was remarkable before his time for its want of water; but Thomas, like another Moses, struck his staff into the ground, and since that time Otford has been supplied with limpid streams, which may be seen rushing and sparkling in all directions. The place in which the staff was struck is still known as Becket's Well; but the peculiar construction of the enclosure which contains the water leaves little doubt as to its having been a Roman bath, which was possibly utilised by the popular saint. Pieces of Roman tile found in its proximity also seem to confirm this supposition. As the water of the well is believed to be of a medicinal quality, St. Thomas is said to have bathed in it for the benefit of his health; and in later times the Archbishops of Canterbury, when worn out with old age or sickness, used to retire to their manor of Otford for the same purpose. Other traditions relate how St. Thomas knelt one summer evening under the shade of a tree to perform his devotions, but was so disturbed by the singing of the nightingales that he gave them his archiepiscopal malediction, whereupon Philomel took flight, and has never since been heard in Otford. It is also said that the blacksmith mis-shod his mare, for which he received an anathema, and that no son of Tubal Cain since his day has had prosperity in the village. The force, however, of the saint's curses is beginning to be spent. The nightingale has resumed its song in Otford, and the present blacksmith is not only successful, but has been immortalised by Otto Weber in his painting of "The Casting of the Shoe."

The archbishop's manor-house at Otford must have been a considerable place in Becket's time, although it is described as "mean" some centuries later. In evidence of this, Alanus relates that when Becket fell into disgrace with the king, the Bishops of London and Chichester came to him, declaring that if he would surrender up to the king his mansions at Otford and Wingham, he might have a chance of recovering the royal favour. That the Archbishops of Canterbury after Becket resided more or less at Otford is most certain. Archbishop Winchelsea entertained Edward I. here in great state. He died at Otford in 1313; and Simon Islip also spent his last days at Otford. The latter consecrated his nephew, William Whittesley, to the See of Rochester, in his private chapel at Otford.



A HOLIDAY VISIT TO OTFORD.

This same Whittesley came to be Archbishop of Canterbury; and he, too, is found at Otford in his old age, a confirmed invalid, when, in 1372, he consecrated Thomas de Arundel to the See of Ely, another bishop who, in his turn, became Archbishop of Canterbury. An old tomb-like structure in the chancel of Otford Church, without inscription, and with ornaments almost erased by time, is probably the resting-place of one of these prelates.

Archbishop Henry Deane, who was raised to the primacy in 1501, rebuilt the greater part of the manor-house; but his successor, Archbishop Warham, does not appear to have been satisfied with the house and its improvements, for he is said to have pulled it all down, except the walls of the hall and the chapel, to make room for a palace upon which he spent £33,000. This palace he intended to build at Canterbury, but the inhabitants disputed his right to the ground, and he therefore retired to Otford. Warham was probably the last archbishop who lived at Otford. Cranmer gave to Henry VIII., in exchange, whatever that means, the manor, landship, and seigniory of Otford, and the manor of Otford Stuyens (*alias* Sergeants) Otford, with the chapel of Otford annexed to the parsonage of Shoreham; and all his other estates in Otford. Cranmer's secretary, Morice, remarks concerning this transaction: "My lord minded to have retained Knole unto himself, and said it was too small a house for his Majesty. 'Marry,' said the King, 'I had rather have it than this house'—meaning Otford—'for it standeth on better soil. This house standeth low, and is rheumatic, like unto Croydon, where I never could be without sickness; and as for Knole, it standeth on sound, perfect ground. If, therefore, I should make my abode here, as I mean to do now and then, I will live at Knole, and most of my house shall live at Otford.'" Morice adds, "By this means both these houses were delivered into the King's hands; and as for Otford, it is a notable, great, and ample house whose reparation yearly cost my lord more than one would think."

But the splendour of Archbishop Warham's magnificent new palace soon departed—it was in ruins scarcely forty years after his death. The chiselled stones, almost as perfect as when they came from the mason's hands, lie half buried in the débris of the court, and the carved oak has been ruthlessly taken away to form part of other buildings; some of it is to be found in the village inn, which possesses several Gothic chimney-pieces and elaborately-carved doors. There still stands, however, a tower which is relentlessly used as a smithy, and what appears to be a corridor, converted into cottages.

The Church of Otford is dedicated to St. Bartholomew; and before the Reformation it was famous for a miraculous image of that saint. The miracles performed by it are said to have affected the continuance of the human race and the proportion of the sexes. A cock was offered for a son, and a pullet for a daughter, and thus, as old Lambard says, the priest of Otford managed to purvey to himself all the poultry in the neighbourhood, the country women being as stupid as the capons they brought. Henry VIII., coming one day to Otford, heard of this scandal, and ordered the superstitious image to be removed. The tower of the church is evidently older than Becket's time, but it was probably much improved by him. A fire is said to have partly destroyed the church in the reign of James I.; but it was restored in the succeeding reign, and the chief entrance was ornamented with an outer porch constructed of oak, which bears date 1637.

The oldest register begins at 1630, and on the fly-leaf it is written that marriages are prohibited from Advent Sunday until the 15th of January, from Septuagesima Sunday till the first Sunday after Easter, and from Rogation Sunday to Trinity Sunday. The handwriting seems to be that of an incumbent of Otford, whose name follows with the date, 1725.

Many of the entries in the registers are very curious. In an old book containing the assessments and parish accounts, we read that Goody Squib got 2s. a week, and Goody Wright 1s. 6d., for acting as nurses. The former is also noticed as having been voted 1½d. for a new cap, and on another occasion 2½d. for mending the clerk's "britches." Thomas Hill, on his recovery from the small-pox, was voted 3d. for "a fool pott of beere;" and Thomas Norbury, the parson, has 1s. for churching "2 wimmin." In May, 1734, the same Thomas Norbury was paid out of the parish funds £1 15s. for "marriin Elezebeth Idels," and 11s. was added for the clerk's fees and other expenses. This was certainly an enormous sum for the work. The churchwardens also had their visitation expenses out of the parish funds. In the month of May, 1732, there is an entry for what was "laid out att the visitation." After lamb, veal, bacon, "2 hundreds ½ of Sparergrass," with "bred, butter, chese, greans, and dresing," come £1 11s. for "bear, wine, punch, and *cards*," and then 3s. 6d. for "more punch and bear." For the 7th of December, 1725, there is an entry of the marriage of Henry Clark and Sarah Thorp. A note in the register says that the said Henry Clark was ninety-nine years old on his wedding-day.

The Vicarage of Otford was formerly a chapelry appended to the parish of Shoreham. Edward VI. gave to Sir Anthony Denny, knight, the parsonage and advowson of Shoreham, with Otford, "to hold *in capite* by knight's service." But Sir Anthony immediately exchanged with the Dean and Chapter of Westminster for the advowson of Cheshunt, in Hertford; and since that time Otford has remained a possession of the Abbey.

There was a hospital for lepers at Otford in the reign of Henry II., and at a very early time there was a workhouse of a primitive kind, which provided food and shelter for all who were destitute.

The Rye, or Le Rye Manor, was formerly an important family residence in the parish; but it is now represented only by a few dilapidated barns. In the reign of King Edward III. four marks were appointed to be paid out of this tenement, which was held by the archbishop, to Adam Fleming, for celebrating divine service in the chapel of Apuldrefelde for the



"—— ONE AND ALL
TROOPED TO THE GATE AND MOSS-GROWN WALL."

"HARVEST" (page 591).

good estate of the king In the time of Richard III., the Rye House estate was possessed by John Palmer, by one of whose descendants it was sold to Henry VIII. It has since passed through other hands, and is now the property of the chief landowner in the parish, Samuel Wreford, Esq., of Broughton House.

The Broughton Estate, from which Mr. Wreford's house takes its name, was formerly the property of Sir George Harper, who conveyed it to King Henry VIII. in exchange for lands in Essex.

It was afterwards possessed by the Polhills, who have several family monuments in Otford Church, the chief being one with three finely-sculptured figures, recording that the deceased was a great-grandson of Oliver Cromwell.

HARVEST.



LAST night we saw the sunlight fall
Beyond the gate and old stone wall,
And brighten on the stooks of wheat,
Ripe after days of brooding heat;
And in the lane we lingered long,
Then homeward turned, a sleepy throng.

Yet glad to hail the joyful day,
We rose while still the dawn was grey,
And roused the house, a merry band,
The happiest children in the land;
And all were dressed, and breakfast done,
Before the day had well begun.

The sun looked out, and quickly dried
The gleaming dew, and glorified
The broad array of clustered sheaves,
And pierced the lane's green roof of leaves,
And shone in strength, as one and all
Trooped to the gate and moss-grown wall.

And mother came, with Margery
Our eldest sister, pleased to see
The busy harvesters and hear
Our cries of triumph shrill and clear,
As heavy waggons loaded high
With rustling sheaves came rumbling by.

Late in the golden afternoon,
Yet long before the rising moon,
The last great waggon-load was piled,
And, lovely still, the sunlight smiled
Above the toilers resting there,
And those broad acres reaped and bare.

J. R. EASTWOOD.

CHECKMATED.

CHAPTER THE FIRST.

APARTMENTS TO LET.



"I WISH I was a man!"

"A man, my dear!"

"Yes; I'd soon find out what Roger Grey means."

"Roger Grey, my dear?"

"Yes—don't you see what an impression he has made on Cecilia? I'm sure if things go on like this her health will quite break down. Sometimes I think it would be better to ask Ned not to bring him down so often; but then he may mean something by his attentions, and one doesn't wish to discourage him; it would certainly be a desirable match for the dear girl. I did hope when I arranged about her staying with his mother to see Dr. B—— that something would come of it."

"By-the-by, did she see much of him then?"

"No; as it happened he was only able to dine at home one evening that week."

"Well, Constantina, I must say *I* never saw anything specially marked in his way with Cecilia; he's so very friendly with us all. And he's just the sort of man to show kindness to any one at all weak or ailing."

"But why should he come so often?"

"Why, you see, my dear, it must be a great pleasure to a man who's hard at work all the week in town to spend Sunday in the country; and then he and Edward are so fond of each other, and I'm sure your brother couldn't have a better friend. I really think, my dear—though, of course, I have great reliance on your judgment—it would be better if Cissie dismissed this idea from her mind."

Mrs. James did not venture to add that only the day before, her son had remarked that he was sure Cecilia's incessant novel-reading was at the bottom of all her lack-a-daisical complaints.

"It's too late for that, mother," replied Miss Con-

stantina; "and really something must be done to save her from this fatal suspense. I'll tell you of a plan that has occurred to me. Did you notice Mr. Grey saying last time he was here that this was just the kind of country his mother would enjoy? Suppose we invite her and his sister here for two or three weeks? It would be so natural then to propose that he should take a room at the 'George,' so as to be constantly with them—I know he meant to be with them part of the time they were in the country this autumn—and then he and Cissie——"

She stopped abruptly as there entered a short, stout, fair-haired young lady, rather pretty, and very fretful-looking.

She was wrapped in a pale blue shawl which she held with one hand, and clasped with the other a yellow volume, in which one finger was inserted as a book-mark.

"Well, dear, how are you this morning? Did you manage your breakfast?" And as Miss Constantina made these inquiries she arranged the cushions of the sofa towards which her sister was advancing.

"Oh, no! Just a few mouthfuls of the ham. I don't believe, Stantia, it's really sugar-cured."

Miss Constantina rang the bell.

"Bring Miss Cecilia's beef-tea and some toast directly; and first the couvre-pied from the drawing-room."

On the tray with the beef-tea was a foreign-looking letter.

"From Berlin, mother—Aunt Charlotte. Shall I read it to you?" and without waiting for an answer Miss Constantina opened it and read:—

"MY DEAREST CAROLINE,—I am suddenly prevented from accompanying my Theodore to England; I will explain in my next letter. I am most unwilling he should be deprived of the trip—his last chance before entering on his partnership in his poor father's late business. Will you, at least for a short time, receive him on his arrival? He has many invitations, but it would be a great relief to me, as he has never been in England, if he could be among near relatives at first.

"Your affectionate Sister," &c.

"Well, dear, of course we can't refuse," said Mrs. James, somewhat nervously, as she observed the look of vexation on her eldest daughter's face.

Miss Cecilia's absorption in her novel was only broken by an occasional absent-minded application to her beef-tea.

"Well, I must go into the town," said Miss James abruptly. "Mother, didn't you want your spectacles mended and your wool matched?" And soon her tall person might have been seen in Riverstoke High Street, where she exchanged greetings in passing with every one she met, and one or two people turned back after passing her, with a half-smile, as they watched her martial step and lofty bearing. A fine handsome woman was Miss Constantina James, of about forty years. She had a determined but not unkindly expression of face, and had a repute in all that country-side for masculine force of will and character and somewhat masculine tastes. It was a well-known tradition how, on the removal of the James family to their present abode from a larger place some miles away, she had had transferred bodily a large hay-stack that her favourite horse might undergo no change of diet. Since her father's death she had become in every practical sense head of the Coombe Lodge household, consisting of her widowed mother and younger sister and brother, the latter now reading in London for the Bar. She was not wanting in womanly tenderness if only her authority was unquestioned, and her tenderest point was certainly her affection for her young sister, who up to the present time had been susceptible of every impression Miss Constantina wished her to receive; the latest impression being that Mr. Roger Grey, their brother Ned's London friend, was in love with her, and yet trifling with her, and injuring her health thereby.

It was as rare a sensation to Miss Constantina as it was unpleasant to have her plans thwarted as they were by her aunt's letter that morning (for there was but one spare room at Coombe Lodge, so the German cousin's intrusion would put Mrs. Grey and her daughter out of the question); but she was not easily checked. Her first visit was to the butcher.

"Please, Mr. Bull, send as soon as possible six pounds of gravy beef, and about the same quantity of white meat, to make stock."

"Yes, ma'am. If you're going to have company we shall have some prime beef from the Duke of ——'s this afternoon."

"Oh, no, Mr. Bull; it's to make beef-tea and broth for my poor sister."

"Excuse me, ma'am," said Mr. Bull, looking puzzled, "then wouldn't it be better if I sent the meat in smaller quantities, as the weather's so hot?"

"No, thank you; it won't have to be kept very long. My sister requires nourishment every two hours. Mr. Bull, can you tell me of any lodgings to let about here?"

"Well, Miss James, Mrs. Hambrook, at Bracken Farm, told me last week she wanted to let a sitting-room and two bed-rooms."

* * * * * *

"There, miss, now I am sorry!" exclaimed Mrs. Hambrook as, ten minutes later, Constantina stood at her door. "The rooms are just gone; I've just sent a letter to say two ladies can have them who wrote from seeing my advertisement in the *Times*. They're coming on Saturday."

"Can't you write again and decline them?"

"I'm afraid not, Miss James; there have been two or three letters arranging about it all. Mr. Jennings at the post-office has some nice-sized rooms to let, though, but I fancy they're poorly furnished for gentlefolks."

Straight to the post-office marched the lady. Yes, the rooms were pleasant, looking out on a pretty garden behind the house, and beyond to the very view which had called forth Mr. Roger Grey's remark that his mother would enjoy such country. Miss Constantina could easily supply deficiencies of furniture from Coombe Lodge. Every detail of such arrangement took instant shape in her active mind. These lodgings were nearer than Bracken Farm; her mother should write that day and recommend them to Mrs. Grey. After all, Miss Constantina felt sure of succeed-

ing, as usual, in carrying out her plans; a little patience and firmness now, and all would surely soon be settled.

CHAPTER THE SECOND.

AFTERNOON TEA.

"How far is it to Coombe Lodge, Mrs. Hambrook?" asked one of the lady lodgers at Bracken Farm, as the landlady was clearing the table after their early dinner.

"A little over a mile, ma'am."

"What do you say, Ruth, to the walk this afternoon? I can't do any more to my picture to-day; the lights are so chagned by afternoon."

"Certainly, if you like, Laura. It was very polite of them to call on us."

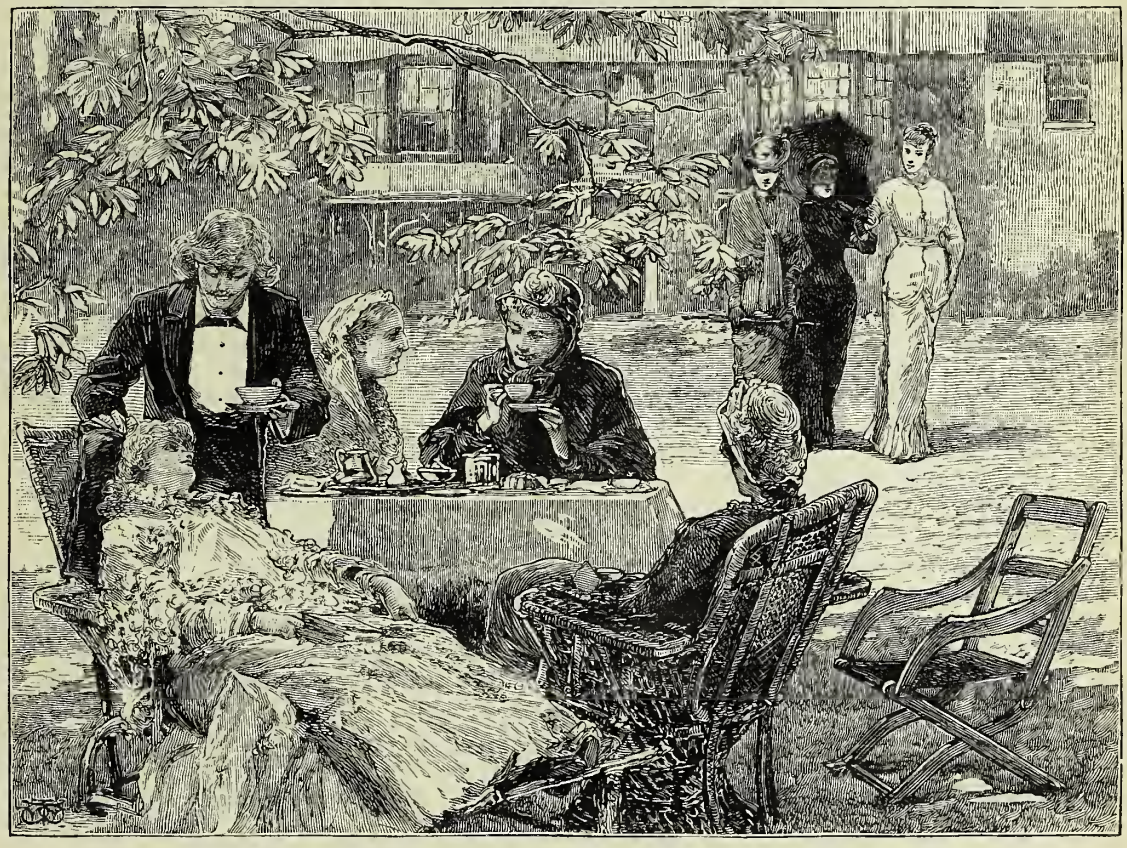
"Well, suppose we start in an hour? It will be cooler then."

"Yes, that will do nicely," said Ruth Alison, then went up to her room, and as she sat down on a low chair near a little book-covered table by the window her face fell into a very weary expression. But in spite of her evident sadness, there was a look of patient composure about her beautiful mouth and her whole bearing, which told clearly of the bitterness of suffering overcome.

After a few minutes of dreaminess, she drew a manuscript book towards her, and wrote:—

"I am thankful to be in this quiet place for a little while: it is a breathing time, and I will not doubt that my next step will be made clear. I hope some real definite work in life will be given me, but I must keep in mind my text for to-day—'Faithful in a very little.' Even this tiresome visit to strangers is part of my appointed work to-day; and if one takes life day by day, it won't be too long; and then—oh! I hope it is not wrong to think of this—when it is all over I shall surely see him again."

Then, evidently stirred by an irresistible impulse, she rose and took a small packet from her desk. It



"SO THE TRIO PASSED OUT THROUGH THE FRENCH WINDOW TO THE LAWN" (*p.* 594).

contained the framed photograph of a very handsome, noble-looking man, and a letter, which ran:—

"My Dear Ruth,—God forbid I should stand between you and your duty. All selfish feeling apart, it seems to me your first duty is to stand to your promise to me, since, as you say, your affection for me is unchanged. I cannot help fearing that it is mainly because your own wish, as I dare to think, is on this side, you, in your high standard of self-sacrifice, lean to the other. May I just say, remember that my life's happiness is in your keeping, and ask you to consider the matter a few days longer before you absolutely cancel our engagement? I only ask you to abstain from this step, not to leave your father for my sake till you can do so with a clear conscience.

"I am, yours unchangeably,
"Roger Grey."

Oh that she had waited those few days, as at first she had resolved to do! but even as she had read the letter she was summoned to the room where lay her selfish tyrannical father, who had, like a spoilt child, after consenting to his daughter's engagement at first, changed his mind, and fretted himself ill at the idea of losing his patient, loving, useful companion.

Now to his eager question, "Well, Ruth, have you

settled that matter?" she answered, her heart sick with despair—

"No, father, but I will."

"To-day?"

"Yes."

And that day—the first time for three weeks—Mr. Alison got up and dressed for dinner, and pressed his daughter in vain to partake with him of dessert.

That was ten years ago, and now, as she looked down at the fresh crape she wore for her father, she said to herself, even while with streaming eyes she kissed the precious photograph—

"I am glad I was with him at the end, and these lonely years have taught me much concerning the eternal things for which dear Roger lived. Perhaps God has already made him happy in his earthly life."

For she had heard nothing of him these ten years past, but that he had made a voyage to see his family, whose home was in New Zealand.

A little later, and Ruth, with her elderly artist cousin, Miss Laura Cosham, was shown into the Coombe Lodge drawing-room, where at once Miss Constantina appeared, and greeted them cordially.

"Will you be inclined to join us in the garden?" she said. "We have friends with us, and tea is just laid there. I have a sister in delicate health, and we get her into the air as much as possible."

So the trio passed out through the French window to the lawn, where, beneath a spreading tree, was a couch, on which Miss Cecilia was reclining. Mrs. James was there, and two lady visitors, one quite a young girl, and there was also a very peculiar-looking youth. He had large, round eyes, very long hair, and a faint moustache, and wore a conspicuous white shirt-front, an elaborately braided waistcoat, a large turn-down collar, and very high-heeled boots with cashmere tops.

He bowed with an absent-minded air when introduced to the new-comers as Mr. Theodore Miller, then resumed conversation with the fair invalid, to whom he was in the act of handing a very large breakfast-cup of cocoa.

Miss Constantina was evidently making much of the two lady visitors. Miss Laura Cosham, with the elder of these, fell into a group with their hostess, and Miss Constantina sat in confidential nearness to the young daughter, placing a chair close by for Ruth, who was also within earshot of Miss Cecilia's sofa.

"He doesn't speak positively," was the answer to some question of Constantina's. "He's likely to have to go abroad very soon about some difficulties concerning our property there, and he has a great deal to arrange in town first."

* * * * *

"Yes, it must be lovely indeed, Theodore," came in languid tones from the sofa. "It has been one of the dreams of my life to see the Rhine by moonlight."

"I shall ask your leave to read to you a few artless verses of my own on that subject. They are rather 'subjective' than 'objective,' but you will, I know, appreciate them. They describe the longings of a spirit with whom the garish glitter of the world's sunshine is not 'sympathetisch,' and should be read in the soft gloaming."

"I suppose you made your tour with some congenial friend?"

"Ah, no! August Richter, alas! did not understand me. He has a soul, but his real being, his inner 'ich,' is not yet awake. I have views of a literary career," he said, lowering his voice—"at least, in combination with the material occupation to which, as I confided to you, a cruel fate has bound me. I should first offer to the world a collection of thoughts from the note-book I have mentioned to you."

"Really!" exclaimed the invalid. "What shall you call it?"

"Metaphysical, Physiological, and Psychological Sparks from a Poet's Anvil," he replied; and Cecilia's blue eyes expressed yet fuller admiration.

Meanwhile the talk between Miss Constantina and her young friend had grown still more confidential; but the voice of the former lady was not susceptible of modulation, and Ruth unavoidably overheard—

"I think it's always a gain to sisters when their brothers marry, if they choose at all wisely. I often wish our Edward would take a wife; don't you feel the same about Mr. Roger?"

"Well, somehow one never thinks of Roger marrying."

"Why? Is he so hard to please, or hasn't he any heart?" asked the other half-jokingly.

"Yes, indeed!" the girl exclaimed. "I never knew any one with so much feeling as Roger, but he is so grave and reserved, and never seems—at least, when he's with us—to care for young ladies' society."

"Well, I dare say some of these days he'll surprise you."

The young lady only laughed, but Ruth was sure Miss James glanced with a meaning look towards her sister's couch. Her attention had been caught by the name of Roger, but she struggled against connecting any foolish fancies with it; she had not noticed that the strange ladies had been named to her and her cousin as "Mrs. and Miss Grey."

"Ruth, my dear, I think we will be starting for home," said Miss Cosham. "My cousin is not very strong," she added, turning to their hostess, "and the evenings are a little chilly as the sun goes down."

In a moment Miss Constantina was all eager kindness, and insisted on ordering the pony-carriage to take the ladies home.

CHAPTER THE THIRD.

"WHERE CAN HE BE?"

THE Sunday morning congregation was gathering at Riverstoke Church in unusual numbers, for the weather was remarkably fine. The Coombe Lodge wagonette drove up, containing Miss Constantina and, to the wonder of all, Miss Cecilia, and Mrs. and Miss Grey, while on the box sat Mr. Theodore Miller.

For a few minutes after alighting the party lingered at the church gate and looked down the road.

"Please don't wait," said Mrs. Grey; "he meant to have a good long walk, and may be a little late."

"Well, he knows our pew," replied Miss Constantina; and as they took their places she laid down her waterproof cloak at the end seat next to Cecilia, contriving that Mr. Theodore should enter the pew before her sister.

"Can you accommodate a lady?" asked the old verger. "We're very full this morning."

Miss Constantina hesitated a moment. "We expect a gentleman," she began, speaking across Theodore and Cecilia.

"Let us find other places," whispered Theodore to his neighbour; and before Miss Constantina could believe her eyes the audacious youth had left the pew with her sister, and the pair had ensconced themselves in free sittings at some distance, on which the old clerk made a beckoning gesture, which brought forward the younger lady from Bracken Farm into Miss Cecilia's vacated seat. Now the organ began to sound, and in a few minutes choir and clergy entered. Ruth was looking with some interest towards the chancel, Mrs. Hambrook having told her that she would hear a real good sermon if the rector preached, when she saw Miss Constantina, whose head had been mostly turned round towards the church door, give a welcoming sign with her hand. Involuntarily looking round, she saw walking up the aisle—Roger Grey!

Yes, she would have known him anywhere, though he looked fully ten years older—his face had become much thinner, and his hair was tinged with grey. Instantly she turned away, thankful she still had her thick crape veil down. He had certainly not recognised her, or he would hardly have come so quietly into the pew, removing the waterproof cloak to make room for himself beside her.

The service began, and Ruth soon grew calm. It was helpful to remember where she was, and after a while she was able to join in spirit, though silently, in worship, and to realise in some measure "the things unseen but eternal," in view of which one reads so clearly "but for a moment" written on the hopes and fears, the joys and sorrows of the things of time. When the first hymn was given out there occurred a little embarrassment about books, and she had no choice but to share with Roger a large one which had been handed to her. Suddenly she was conscious that a quiver passed over him; his singing faltered, his hand trembled. She knew he had recognised her. How she wondered for a few moments, then remembered that her glove was off, and that she wore on her forefinger a very remarkable signet ring of her father's, which, no doubt, her old lover had not forgotten.

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"Oh, dear! oh, dear! there's no cover on the wagonette! It was so fine when we started. My poor Cecilia, so susceptible to cold! Here, Cissie, my waterproof is the largest. Why, where is she?"

They were standing in great dismay at the church door; drenching rain had come on during service-time.

"I'm almost sure," said Mrs. Grey, "I saw your sister and your young German friend go out by the door near which they were sitting."

A look of extreme vexation came over Constantina's face.

"Oh, Mr. Grey!" she exclaimed, "will you please go—Why, where is Mr. Grey?"

"I think he must be looking after your sister already," said Mrs. Grey; "he hurried out alone when I told him you had so kindly promised to take us home."

Miss Constantina looked more content, only lamenting, as at last the wagonette with the three ladies inside started for home—

"She will be so terribly exhausted! I have a tin of Brand's beef-jelly all ready for her in the carriage; but surely we shall overtake her on the road."

* * * * * *

That Sunday afternoon Miss Constantina went by arrangement to take tea with Mrs. Grey. The little sitting-room at the post-office looked quite full as she entered, for the family trio were there, and besides, to her bewilderment, seated on the sofa beside Mrs. Grey was Miss Ruth Alison, looking quite at home, her cloak and bonnet laid aside. Their hostess appeared rather embarrassed, but Mr. Roger Grey came forward with his usual quiet self-possession, though with a look of animation and happiness in his eyes which had never been seen at Coombe Lodge, and said simply, after giving her a cordial welcome—

"I need not introduce Miss Alison; I find she has already been a visitor at your hospitable house. She and I are very old friends."

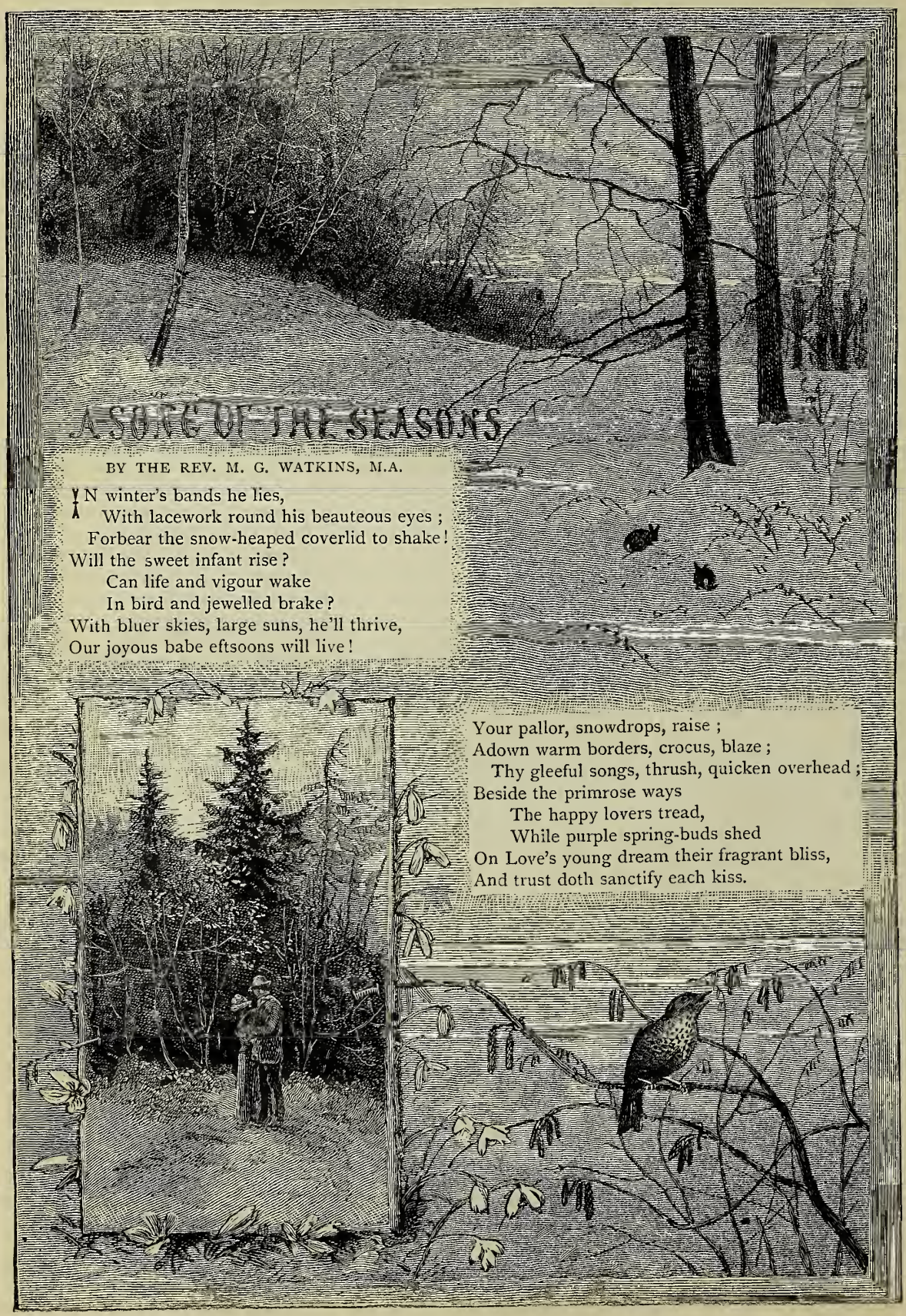
"Indeed!" rejoined Miss Constantina, a mixture of vexation and amusement in her face, as she held out her hand to Ruth, then turned to Mrs. Grey. "My sister would have come too, but is otherwise engaged—engaged, in fact, to our cousin, Mr. Miller. The young people settled it on their way home this morning."

A quick smiling glance passed between Roger Grey and Miss Alison; then the warmest interest was expressed by all in Miss Cecilia's prospects.

"It is not in all respects what we should have chosen for the dear child," said Miss James, "but her health is the first consideration, and her happiness has done her good already. She absolutely declined her egg and sherry just now."

And when, on taking her leave, Mr. Roger Grey said, as he conducted her to the door—"May I come presently and offer my congratulations, Miss James, and ask for yours?" she walked homewards, her head slightly less erect than usual, but satisfied in her mind that all was for the best, though certainly for once in her life she, Miss Constantina James, had been checkmated.

ALICE JANE TURNER.

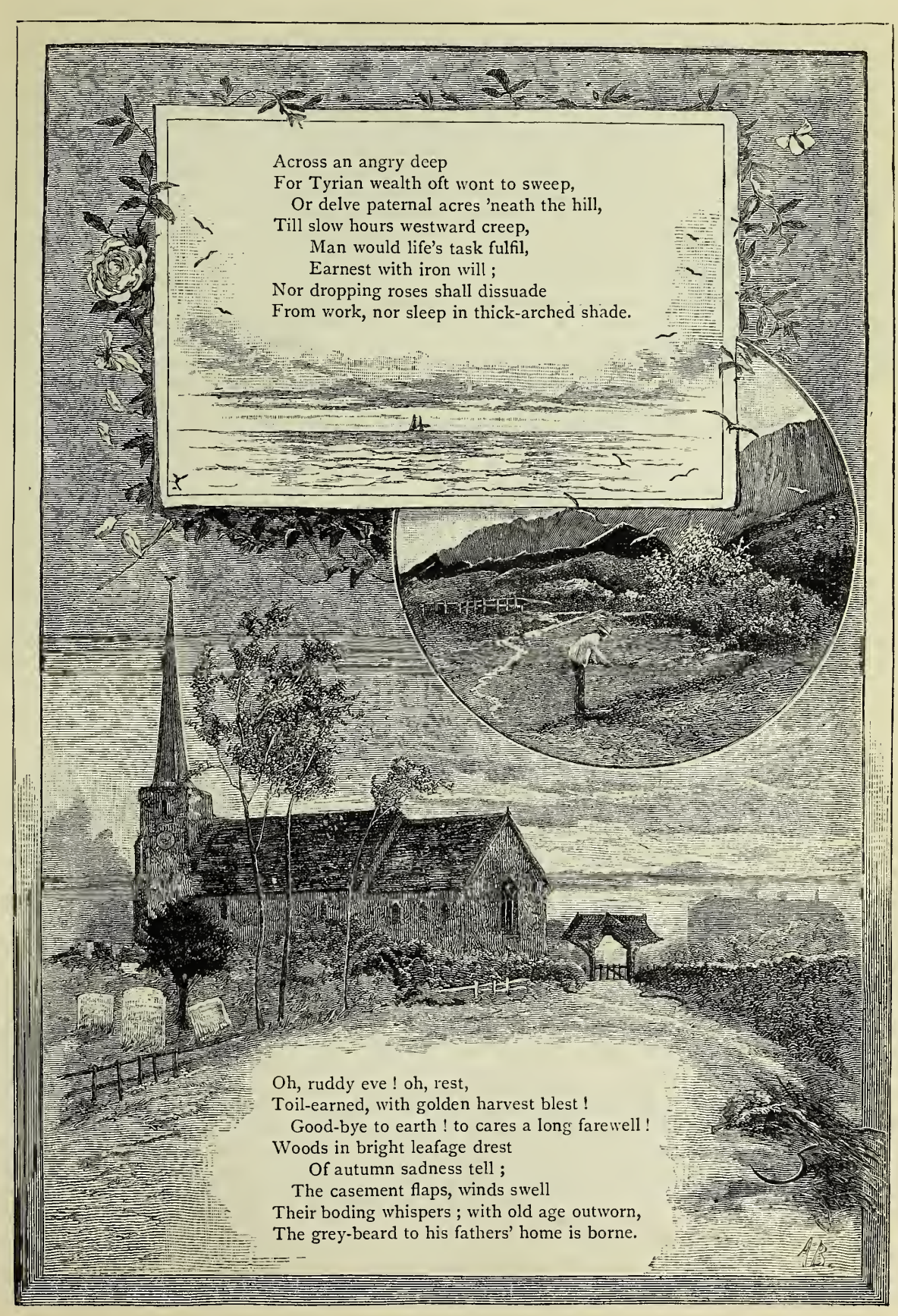


A SONG OF THE SEASONS.

BY THE REV. M. G. WATKINS, M.A.

IN winter's bands he lies,
With lacework round his beauteous eyes;
Forbear the snow-heaped coverlid to shake!
Will the sweet infant rise?
Can life and vigour wake
In bird and jewelled brake?
With bluer skies, large suns, he'll thrive,
Our joyous babe eftsoons will live!

Your pallor, snowdrops, raise;
Adown warm borders, crocus, blaze;
Thy gleeful songs, thrush, quicken overhead;
Beside the primrose ways
The happy lovers tread,
While purple spring-buds shed
On Love's young dream their fragrant bliss,
And trust doth sanctify each kiss.


Across an angry deep
For Tyrian wealth oft wont to sweep,
Or delve paternal acres 'neath the hill,
Till slow hours westward creep,
Man would life's task fulfil,
Earnest with iron will ;
Nor dropping roses shall dissuade
From work, nor sleep in thick-arched shade.
Oh, ruddy eve ! oh, rest,
Toil-earned, with golden harvest blest !
Good-bye to earth ! to cares a long farewell !
Woods in bright leafage drest
Of autumn sadness tell ;
The casement flaps, winds swell
Their boding whispers ; with old age outworn,
The grey-beard to his fathers' home is borne.

EVENING COLLEGES FOR WOMEN.



THERE are at the present time in London several tolerably flourishing institutions, where working women may spend their evenings in a pleasant and profitable manner. These evening colleges were started to supply a much-felt want—namely, a place of secondary education for women engaged in business during the day, who feel that the very superficial education they received in their childhood is not sufficient to satisfy their maturer years.

Most of the teaching is gratuitous. It is undertaken by a large staff of lady and gentlemen volunteers: so the authorities are enabled to charge almost nominal fees—an advantage much appreciated by the scholars, to the majority of whom a shilling is a considerable sum, not to be expended without a great deal of consideration. The subjects taught are very comprehensive, and include preparatory classes for writing, reading, dictation, English grammar, literature, and arithmetic, and more advanced classes for German, French, Italian, Latin, and elementary Greek, drawing, singing, business letter-writing, book-keeping, geometry, short-hand writing, botany, geography, physiology, political economy, advanced English composition, reading and recitation, study of Shakespeare; and at one college they have plain cookery classes, at five shillings the course of ten lessons.

The college year is divided into four terms; the fee for membership is in most cases a shilling per term. The colleges are open only in the evening, from seven to ten o'clock. The fees vary somewhat at the different colleges. The charge for teaching foreign languages is from three to four shillings a term, and other subjects are from one to three shillings each.

The requirements of the students are very varied, some of the pupils being unable to read fluently, whilst others are governesses, only anxious to add another accomplishment to their list. The managers do their utmost to meet these different wants, and are always willing to endeavour to organise fresh classes when a sufficient number of students willing to join can be found. But it is very discouraging for teachers, who have come perhaps at great personal inconvenience, to find that three-fourths of their class have not considered it worth their while to attend.

The councils of the different colleges are always glad to hear from competent ladies and gentlemen willing to give their services *regularly* as teachers; but nothing is more likely to be detrimental to the success of these undertakings than the irregular attendance of the teachers. Like all amateurs, some of them are inclined to think that if they send a telegram at the last minute to an assembled class, saying that "they are unfortunately prevented from attending," it will be quite a sufficient excuse; but the pupils are very apt to think otherwise, and will most certainly take advantage of the example, and stay away themselves on the first occasion that they feel the least inclination to do so. Still, after all, the relations between teachers and taught seem to be, in most cases, thoroughly satisfactory. The teachers have been known to invite their pupils to visit them in their own homes—a privilege much appreciated—and lasting friendships have been formed. Some of the classes are so well under control, that the students would never think of staying away without permission, or at the very least without writing an excuse. But irregular attendance is certainly the greatest difficulty the teachers usually have to contend with; and it is not surprising when one considers what a serious obstacle a wet or snowy night must be to those who are unable to afford the price of a railway ticket or an omnibus fare, and whose homes may be two or three miles from the college they attend. It is rather interesting to know the occupations the students are engaged in during the day. The following list is copied from one of the annual reports:—

Assistants in shops and forewomen	14
Bookbinders, folders, and bank-note stampers	5
Cartridge and percussion cap-makers	4
Church-furnishers, crêpe-workers, and fur-liners	5
Domestic servants and housekeepers	21
Dressmakers, milliners, and needlewomen	72
Feather-makers, piano-silkers, and lace-menders	11
Gilder, gold-leaf-cutters, and jewel-case-liner	4
Hair-dresser, perfumers, wig-maker, and hair-workers	10
Laundress, barmaids, and waitress	6
Machinist, outfitters, and warehousewomen	18
Hospital nurses	6
Photograph colourist, painter on tiles, and art students	6
Print-colourers and envelope-folders	3
Secretaries, bookkeeper, and articled pupil	5
Teachers and schoolmistresses	48
Telegraph, post-office, and merchants' clerks	8
Waterproof coat finisher, epaulette-maker, and labellers	4
Shell-box-maker, basket-makers	3
Toy and button-makers	4
At home	132

Those students described as "at home" are in many cases young girls whose occupation has not yet been determined; in others, women who assist in the trades of their fathers or husbands, or who by helping in the house-work of the family save the employment of servants. These institutions are not content to be simply places of education, but also do their best to provide recreation for their members; they all have a pleasant room where conversation is not only allowed but encouraged, and it is in this social intercourse that the teachers become acquainted with the true characters of their pupils. The principal daily papers are regularly supplied, and also some of the leading

magazines are sent by the kindness of friends; lending libraries form an important part of the system.

Slight refreshments, such as tea, coffee, and beef-tea, can be obtained from the housekeeper at moderate fixed prices. The rules at the different colleges are slightly different, but they all provide occasional gratuitous entertainments for their members, such as lectures, concerts, recitations, private theatricals, and social meetings. Their lists of occasional lecturers contain distinguished names. At one of the colleges the following is a list of entertainments given between November and June in one year:—On the 1st of November, Dr. George Macdonald met and addressed the students; on the 29th of the same month, Mr. Ladell gave "A Chat upon the Earth we Live in;" on the 22nd of December, Mr. Ralston told "Mythical Stories about Animals," to 120 students assembled in one of the densest fogs of the winter. On the 31st of January, through the kindness of a friend, a conjurer amused a room-full of students who had braved a worse fog than that of December 22nd. On the 28th of February, some distinguished amateurs gave a concert; on the 20th of March, Miss Gertrude Kellogg recited from American authors. Mr. J. G. Fitch read parts of "Julius Cæsar" with comments on the 8th of April. A conversazione on the 29th of May concluded the list. Members of the Kyrle Society, students, friends, and subscribers on that occasion occupied every room in the house. Wild flowers for decoration were supplied by some friends. Miss Kellogg again recited, and Miss Gerningham played the piano. Several friends took charge of some one room and supplied it with engravings or photographs, with microscopes or telephones. In the cookery kitchen, ices, clear soup, and cakes were made, and supplied at a small charge to cover expenses to more than 200 persons. The very small expense of these entertainments has been met by special donations to the fund, by the occasional sale of tickets to friends and by the sale, at sixpence each, of tickets for a friend to the students.

This is by no means a contemptible list of amusements, and when one considers how dull and pleasureless the lives of most of the students would be without these kindly efforts for their entertainment and improvement, it is impossible to withhold one's admiration from the unselfish and indefatigable promoters of these institutions.

The College for Working Women, 7, Fitzroy Street, Fitzroy Square, has recently been very charmingly decorated by the Kyrle Society; they have painted the walls and doors of the class and conversation rooms, and even the staircase, with designs of birds and flowers, of course including the inevitable sunflower; and some of the members have added embroidered mantelpiece hangings and table-covers, so that altogether the house looks very attractive indeed, and is much admired by students. The managers are glad to let the rooms in the day time for classes or meetings, as a means of reducing the expenses, and have also opened a coffee and reading room for women above the age of eighteen. The subscription to this is five shillings a year, and two references from householders must be produced by ladies wishing to join. The prospectus says: "It is especially intended for the use of ladies engaged in teaching during the day, who have often no place in which to spend the hours that intervene between one engagement and another."

At the College for Men and Women, 29, Queen Square, Bloomsbury, a day school is carried on; and at the Evening College for Women, 1, Queen Street, Brompton, one of the rooms is used in the day time for the office of the Teachers' Training and Registration Society.

These measures are very necessary, for although the teaching is gratuitous, the unavoidable expenses are too heavy to be entirely met by the students' fees, so that unfortunately none of the colleges are free from the disagreeable necessity of appealing to the public for subscriptions.

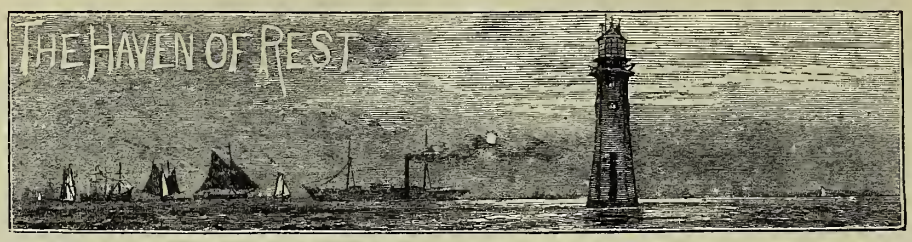
The College for Men and Women is, as its name implies, open to both sexes, and the mixed classes are found to answer well. The council in one of their annual reports say, "We fearlessly invite those to come and judge for themselves who have doubted whether the social life which we consider an essential element in the education we offer, can be carried on in a mixed college."

These annual reports are most interesting; all the teachers are asked to contribute to them a special account of their own class, so that it is possible for even outsiders to arrive at a very fair conclusion as to the progress that has been made in each subject.

Sometimes special classes are held, such as "First Aid to the Injured" and "Nursing" classes by the St. John's Ambulance Society; these are decidedly popular.

The Fitzroy Street College is in union with the Society of Arts, and its students are able to attend the examinations and obtain the certificates of the Society free of expense; the College for Men and Women holds its own examinations and grants certificates. Intending students are always allowed to attend the first lesson of a class free of charge. Bad times affect the attendance of the students very seriously, as even the small fees charged are then too much for them to pay, though they are scarcely more than the cost of fire and light during a winter's evening spent at home. These colleges only require to be better known to be more appreciated; there must be many thousands of girls who would be glad to enjoy the advantages they offer, if they only were more widely known; probably the great majority of the class they are intended for are not even aware of their existence.

Mercy Grogan.



Words by EDWARD OXENFORD. *Music by* FRANCIS EDWARD GLADSTONE, Mus. D.

Andante quasi allegretto.

PIANO.

p *cres.* *sf* *dim.* R.H.

PED. * PED. * PED. * PED. *

p *cres.*

1. "Tossed by the waves and the winds on the o - cean, Help - less - ly
2. "Torn by the bram - bles of trou - ble and sor - row, Scarred by the

p *cres.*

dim. *f*
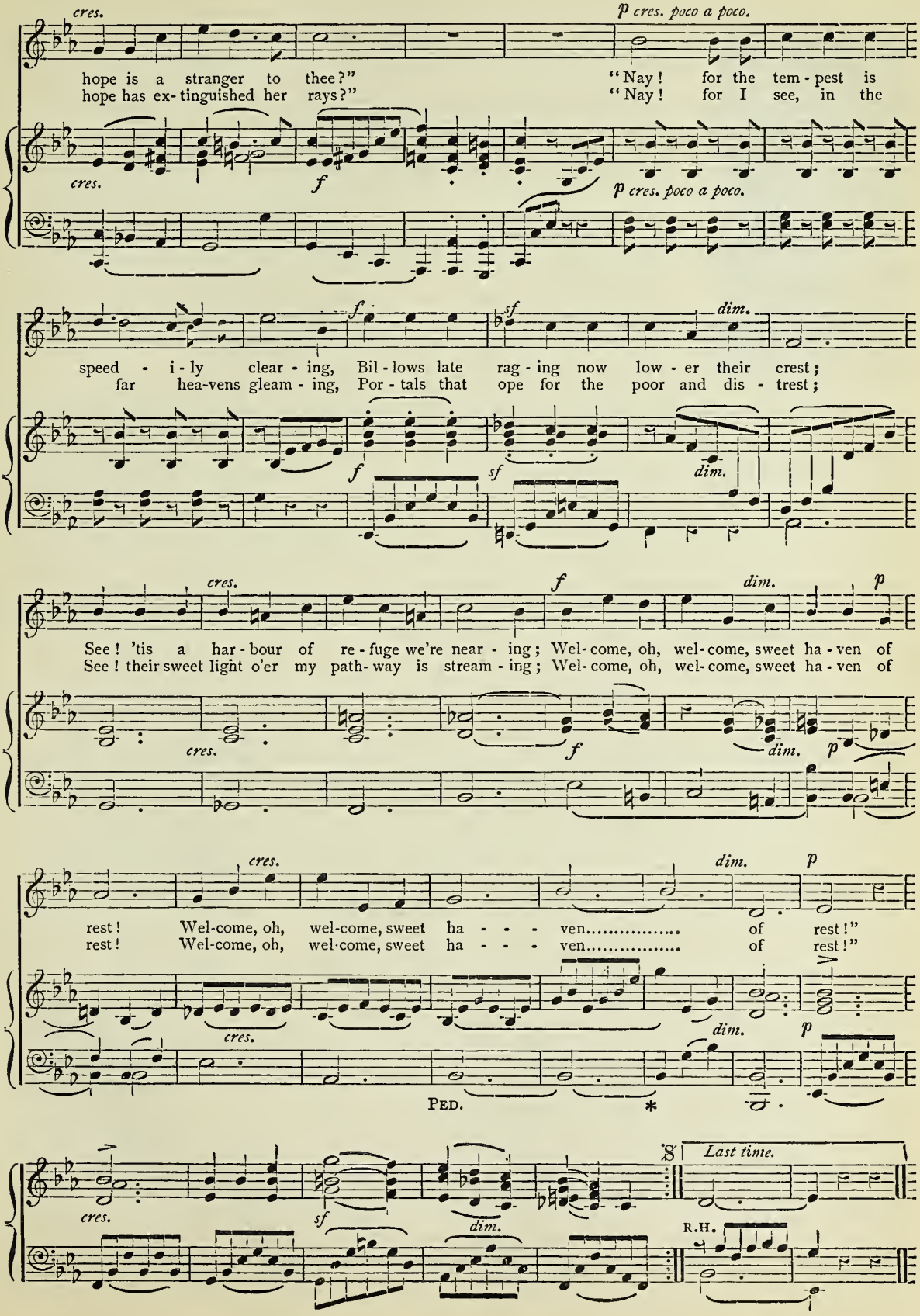
drift - ing a - cross the wild sea, Guide-less, a prey to the wild - est e -
thorns that en - cum - ber thy ways, Heart - sore and wea - ry to - day and to -

dim. *f*

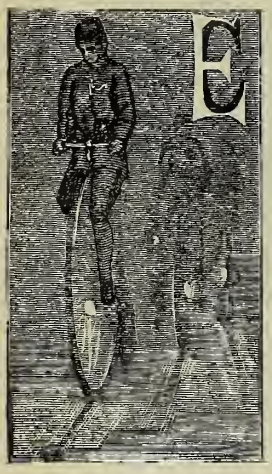
dim.

- mo - tion,—Ma - ri - ner, hope is a strang - er to thee? Ma - ri - ner,
- mor - row,—Tra - vel - ler, hope has ex - tinguished her rays? Tra - vel - ler,

dim. R.H.


cres.
p cres. poco a poco.
hope is a stranger to thee?" "Nay! for the tem - pest is
hope has ex - tinguished her rays?" "Nay! for I see, in the
cres.
f
p cres. poco a poco.
f
sf
dim.
speed - i - ly clear - ing, Bil - lows late rag - ing now low - er their crest;
far hea-vens gleam - ing, Por - tals that ope for the poor and dis - trest;
f
sf
dim.
cres.
f
dim.
p
See! 'tis a har - bour of re - fuge we're near - ing; Wel - come, oh, wel - come, sweet ha - ven of
See! their sweet light o'er my path - way is stream - ing; Wel - come, oh, wel - come, sweet ha - ven of
cres.
f
dim.
p
cres.
dim.
p
rest! Wel-come, oh, wel-come, sweet ha - - - ven..... of rest!"
rest! Wel-come, oh, wel-come, sweet ha - - - ven..... of rest!"
cres.
dim.
p
PED.
*
cres.
sf
dim.
8
Last time.
R.H.

HOW BICYCLES ARE MADE.



EVERY one certainly in this "tight little island" has seen a bicycle. There are many who have never seen a train, but I take it for granted that all at least in Great Britain who read this article have seen one, if not thousands of bicycles; for have not tourists on these iron steeds scoured through the most out-of-the-way parts where railways are not? Even the veriest country lad, living in any spot you could pitch upon from John O'Groat's to Land's End, has seen the bicyclist gliding noiselessly by at the rate of ten to fifteen miles an hour, on a machine apparently so fragile that it is a wonder its spokes, as Old Scrooge said of the turkey's legs, "don't snap in two like bits of sealing-wax;" and undoubtedly they would, were it not for the peculiar hardening process which they undergo in the factory. Although every one has seen a bicycle, few, I should say, have seen them made. Manufacturers of these articles are not at all inclined to allow strangers to inspect their premises even if they have the opportunity, and it was only on special business that I managed to inspect several of these factories, after first obtaining permission in the offices from "the powers that be."

It is an old adage that "birds of a feather flock together," and bicycles and tricyles certainly form no exception to this rule, for their manufactories flock together very thickly at Coventry and a few other towns. Why the bicycle, and indeed tricycle, should have chosen the city of Godiva and the three spires as the chief seat of their manufacture, is as much a puzzle to me as was the adage I have just quoted to Lord Dundreary, and I must use his words and say it is "one of those things no fellah can understand." Coventry, we were taught at school, was noted for ribbons, lace, and watches. What affinity can bicycles have to either of these articles? One would have thought that Birmingham with its plant, skilled labour, and materials would have been the town from which we might expect to get these iron steeds. But no, bicycles would not be swallowed up as it were amongst the many other manufactures of that town, they would have a place pretty much to themselves, so they chose the ancient, legendary, and cleanly city of Coventry. In this city are some twenty or thirty manufacturers, who make the best quality bicycles. In Wolverhampton, one of the busiest, dirtiest, and dustiest of towns, are also to be found about twenty manufacturers of these articles. The cheapest and commonest class of machines are made in this town. There are also a few manufacturers of these articles in Birmingham, London, Nottingham, Sheffield, and a few other places. In the former many of the "parts" are made and sold to manufacturers in other towns, who simply fit them together, but nevertheless style themselves "manufacturers."

In describing the process of manufacture of a bicycle I shall necessarily have to use many technical terms, such as "head," "bearings," "spindle," "hub," "neck," "fork," &c. If my reader be of the male sex, the chances are that he will understand them as well as myself; but if it be you, young lady (no matter what be your age, for you always like to be called young) who scan this page, I fear you will find it necessary to ask your brother, or husband, a few questions to enable you to understand every technical term. But I will be as plain as I can.

The iron of which most parts of the bicycle are made is received from the North of England in long square bars about two inches thick, and four or five yards long. This is then taken into what in large factories is called the "stamping shop." The stamp or die is a large solid block of well-wrought iron, some two or three feet square, on which has been hollowed out, by a chisel and other instruments, an exact shape of a part or "fitting" of a bicycle. In this shop are generally about four or five furnaces, pretty much the same as you would see in any village smithy. There is no "spreading chestnut-tree" overhead, or anything pleasant to relieve the grim spectacle this "shop" presents to one unaccustomed to such sights. A dozen or so young stripped Vulcans are busily at work. They make these bars of iron red-hot, then place the end of the bar on the die or stamp, when a block of iron worked by the foot, called a "hammer," is allowed to descend with great force on the red-hot bar, which instantly receives from the die or stamp its form as clearly as any jelly from a pastrycook's mould; a pair of huge shears severs the stamped part from the other portion of the bar, and there falls to the ground the rough part of a bicycle; it may be a "head," a "neck," "spindle," "hub," or "bearing," for these and many more are made in the same way. During this operation the parts are constantly soused in tanks containing either water or a mixture of water and oil, which has the effect of making them much tougher and harder.

These parts, having now received their form, are when cool taken by lads into what is usually known as the "press shop." Here they are relieved of any superfluous metal they may have considered they had a right to take with them, by being forced through a press which has sharp-edged knives, shaped so as to leave an aperture between them, the exact size and form of the part or fitting forced through it. There are necessarily different-shaped knives for every part of a bicycle that is made by the "stamping" process. Next they are favoured with a few revolutions of an emery wheel, which now takes the place of filing and makes them smooth and bright. These pieces are now

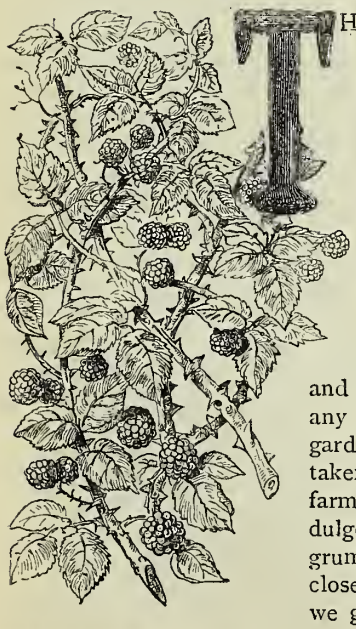
finished and are ready to fit up with the other parts. The "forks," or the two long pieces of metal which run from the centre of the big wheel (the flanges) and into the head of the machine and support most of the weight of the rider, are made of two pieces of steel cut to the required shape, or if hollow, as in some superior machines, they are simply two pieces of round tube bent partially flat and polished smooth on a grindstone. The "flanges," or the parts into which the spokes go, are cut by hand, while some of the most delicate parts of the bicycle are turned, planed, and cut by most precise and costly machinery.

All the parts are finally polished by men on rapidly revolving wheels that have leather surfaces on which has been spread a mixture of glue and emery. A very few revolutions of this wheel will give to any steel parts, or "fittings" as they are called in the trade, a polish that will reflect your face if you look at them almost as well as a mirror. The "rims" or frames of the wheel are bought from iron-founders in the North of England, in strips about half a dozen yards long, and when cut into the required lengths are bent round by a machine into a circle.

The parts thus made separately are now all fitted together, the last operation being the gluing on of the rubber tyres with cement. There are several kinds of cement used, indeed some manufacturers who make their own, keep the recipe of its preparation a secret, but the majority use Rockhill's cement, a preparation made chiefly of gas-tar. The best brands of iron are used in good bicycles, such as "low moor," "best gun," &c. In all the largest manufactories steam-power is, of course, used.

While writing of bicycles I cannot well conclude without referring to the steam-tricycle. A few months since, any one could not walk the streets of London without seeing in glaring red letters the advertisement on all the omnibuses, "Go and see the steam-tricycle." I went one morning early and found the inventor, Sir Thomas Parkyns, alone in the gallery of the Agricultural Hall. He was silently contemplating his machine and enjoying the soothing weed. I entered into conversation with him, and learnt that once again "necessity was the mother of invention." Sir Thomas, like most people, has a "hobby," and that is photography. He invented the steam-tricycle to carry himself and photographic apparatus "far from the madding crowd," where at every bend of the road or lane would be some natural picture worthy of the photographer's art. The machine is so constructed that it will travel about twenty miles an hour, and makes neither noise nor smell. It burns about a pennyworth of spirit a day, and condenses its waste steam into water and pumps the same into the boiler again. It is a clever invention and may become in the future of great value to many who travel, whether for business or pleasure. But as yet lawyers have to decide whether or not it shall be legal to ride it in the public road, for as the law now stands it is necessary for the rider to travel not faster than four miles an hour, and to be preceded by a man carrying a red flag as though he were a steam-roller.

GARDENING IN SEPTEMBER.



THOUGH the month upon which we have just entered must undeniably be called the last of our summer season, yet it is very often, in the earliest half of it at least—certainly it was so last year—the best, and at times the warmest and most enjoyable, of any in the year. We gardeners have latterly taken a leaf out of the farmer's book, and indulged in an occasional grumble, but towards the close of our complaints we generally brighten up in the expression of a hope that we are gradually returning to our old-fashioned seasons—seasons, that is, of longer and more uniformly warm summers, and of winters a little less Arctic-like than they have been of late. As the year, however, begins to wear away, we cannot conceal our anxiety as to the future of our shrubberies, for example, for experience has taught us latterly that evergreens, which from time immemorial we had been wont to regard as sufficiently hardy to stand the English Christmas, may, if the winters of 1879 and 1880 are to be repeated, very likely disappear almost entirely. We must not, however, take too desponding a view of the matter on the one hand, nor must we on the other anticipate what we may have to say on this subject next month, which is generally the first month for alterations in the garden on a large scale, and a time also for considering the best method for protection against a possibly severe winter.

As yet, however, on this bright September morning—on, that is, we will suppose, one of these days in its first and therefore its better half—our flower-beds are all ablaze with scarlet geranium, China aster, verbena, phlox in its coloured vanity, and the bright and showy calceolaria, while our dahlia exhibition is doubtless in full force.

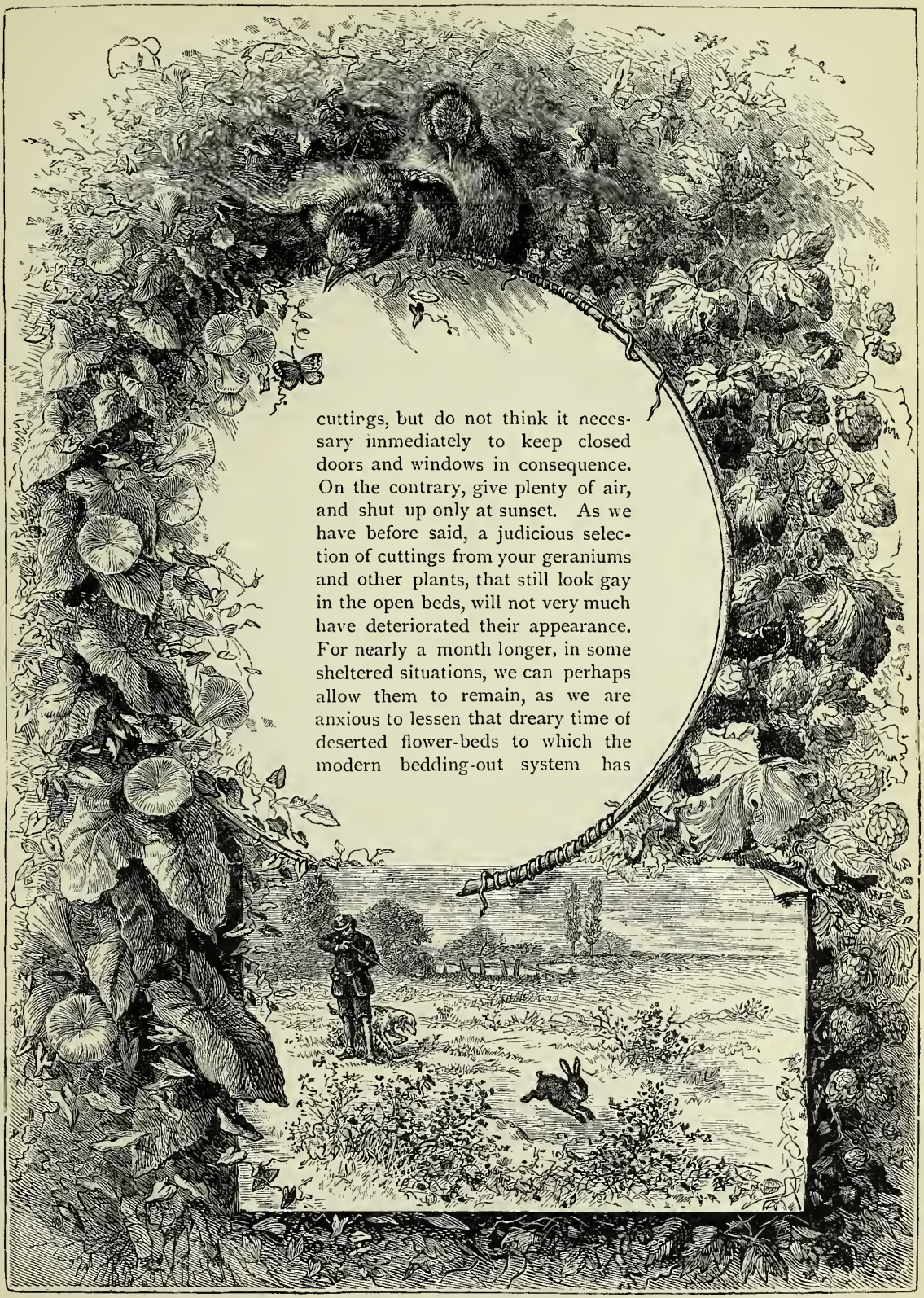
Of course, one of the very first operations this month, if we have not indeed already accomplished it, is the thorough completion of our stock of cuttings for the next season. By a little ingenuity we can so contrive

to rob our flower-beds of these small cuttings, as to hardly let it appear afterwards that we have been pilfering from them at all. Plenty of common sense and contrivance is useful just at this time. Very often we find that our entire small stock of flower-pots is brought into requisition for our cutting supply; and if it runs short, as is too often the case when we are only gardeners on a limited scale, we must fall back upon boxes or old pans as before. While, however, there is a great risk in postponing until late in the season the taking of cuttings, as by that means they have not so good a chance of being rooted and established before the cold weather comes on, yet, on the other hand, there is no necessity if the cuttings are taken in good time to have them all in the greenhouse at once. The longer they can with safety remain out in the open air, the more hardy will they become. Calceolarias can, without fear of losing them, be planted out under any old and unused cucumber frame, and in the winters of years gone by many other flowers might have been similarly treated and successfully preserved. For those who could not boast of a greenhouse, or even a small pit, another old-fashioned method used to be suggested for the possible preservation of a small flower-garden stock. It was this, and we do not see why, spite of the severity of past seasons, it might not in the absence of better material be attempted still: dig a square hole in your garden sufficiently deep to hold your pots when covered over with a flat surface. Place some pieces of board on the bottom to serve as a stand for your flower-pots. Cover over the whole either with boards or with rods so bent as to form a sort of roof, over which mats can be thrown to keep out the severity of the weather. But still, as *some* light is necessary for the well-being of all created things, vegetable as well as animal, some have used in place of mats, waterproof calico or canvas. If however—we are still supposing the absence of a greenhouse—it can be had, a good-sized garden frame is not a very expensive affair. In severe weather place some turf round the wood-work, and throw some matting over the glass. Recollect all you want to do is to keep your plants alive, and to have a nice little stock in hand when the next early summer comes round, ready for bedding out, rather than to have to go to the expense of purchasing flowers at that time, very often at a comparatively fancy price. With a good garden frame, you might like to try another experiment. A few hardy annuals may even be sown under a frame, so as they can be protected alike from hard frost or excessive wet. Of course you will choose the warmest and best possible locality for your frame. Indeed, in years gone by, annuals could be sown in the autumn in the open borders, in sheltered situations to stand the winter, and be afterwards planted out in the spring. Those, however, which can stand the winter where they are sown will flower earlier, and be altogether stronger and better, than those planted out. Or, if you like, sow in pots Indian pink, German wallflowers, ten-week stocks, mignonette, &c. &c., and keep them in a frame till the spring, when they can be afterwards either plunged or planted out in the borders or beds. Gather this month all your seeds from your pods, that have ripened and are in a dry state, or rather we should have said, gather them in the pods, and lay them up in some dry and airy place for some time, before you attempt to remove or rub them from the pod itself. See well to the box and other edgings before the severe or boisterous weather sets in. In fact, begin to get things into orderly trim for winter quarters. If you allow your box to get too large and overgrown, you will, on bending it down, find comfortably harboured amongst it a goodly display of slugs and snails. Let your box, then, be neat and compact without being too tall and bushy, and in some places perhaps altogether worn away or killed by careless treading or wheeling. These ugly gaps give a very untidy appearance to a garden.

Get the auriculas ready this month for their winter quarters, and for this, first see to the drainage of the pots, as carelessness here means the almost certain decay and rot of the fibrous roots. And among the carnations and picotees, where you have taken pains last month with the layering operation, the roots ought to have struck, and by Michaelmas, or perhaps a little earlier, your young plants should be fit for removal and for potting. You can easily put two in a single pot of what is called the forty-eight size, though some prefer using smaller pots, and put only one root in each. To blossom them in pairs or even in threes, however, is as often the custom as not. And very soon also, certainly near the end of the month, we begin to think about our bulbs, and especially about the hyacinths. Those that we intend to bloom in glasses should be so placed in their glasses as to allow of the water just touching the bottom of the bulb, at least until the small white roots begin decidedly to develop themselves. Place your glasses in a dark cellar or cupboard, and let the water be changed about every three weeks. Take care while putting your bulbs in your garden to arrange them not merely methodically, but with an eye to their colour, placing dark against light, or white by the side of dark red, or with a dark blue between two light reds, and so on.

Next month, however, is not at all too late for bulb-planting, and indeed October has perhaps become of recent years the more general time for it. But where any bulbs have been left in the ground and you are wishing to shift their quarters, or perhaps to thin them a little, it is quite as well to get them up at once: they will already, indeed, be found to have recommenced germinating, and in that case a removal will be sure to throw them back somewhat, so that perhaps, if their removal has been decided upon, the sooner it is carried out the better for the bulbs.

A few words about the greenhouse. Have it speedily got into order for the reception of your entire stock. Once we are well advanced in September, it is of course impossible to say how soon the wild equinoctial gales may begin, and a slight frost may as speedily follow. By Michaelmas, then, house your



cuttings, but do not think it necessary immediately to keep closed doors and windows in consequence. On the contrary, give plenty of air, and shut up only at sunset. As we have before said, a judicious selection of cuttings from your geraniums and other plants, that still look gay in the open beds, will not very much have deteriorated their appearance. For nearly a month longer, in some sheltered situations, we can perhaps allow them to remain, as we are anxious to lessen that dreary time of deserted flower-beds to which the modern bedding-out system has

unhappily of late years so accustomed us. But it may be that longer winters, tardy springs, and short summers have in a measure helped to acclimatise our eye to naked flower-beds for nearly two-thirds of the year. We forget, however, that the remedy—as we have on a former occasion more fully hinted at—is to some considerable extent in our own hands, if we are willing not to devote the whole of our beds to bedding-out plants only, but to intersperse among them some hardy perennials, or perhaps a few bright, shrubby, and dwarf evergreens. It is quite possible to dare to be eccentric even in a flower garden.

In our kitchen garden, probably a considerable portion of our potato crop is fit to be dug. And the potato, when fully ripe, should not be left for long in the ground, for it will sooner or later in that case become a prey to the vermin that, do what we will, we often find it so hard to keep under. Then there are plenty of crops that have done their work, that now want clearing off the ground to make room for something else. Indeed, this is the case in the kitchen garden often enough; and yet how often do we see whole rows of withered-up peas, or a spinach-bed tall and gaunt and all run to seed, simply because it is a little piece of trouble to remove it, and so there it is left for two or three weeks in this precious time of the year, the last summer month, exhausting the soil, taking up space, and giving a dreadfully untidy and neglected appearance to our whole garden. Then the onions, if not already attended to, must be harvested in the usual way. Our general trenching of the ground hardly begins as yet; but our old cabbage stumps we never waste, but plant them all out close together in some out-of-the-way corner of the garden, where, perhaps, in the winter time they will supply us with a dish or two of greens when greens are scarce. But the young cabbage plants may now be planted out in your beds. Leave plenty of room—not too much—to walk between your rows, and let your plants be some five or six inches from each other. The celery, too, will need from time to time careful earthing up. Do this in dry weather, and always take care to keep the earth out of the heart of your plant. If you want salads for winter supply, they must be sown now in frames; the winter spinach, too, must be thinned out, and, as before, when you gather from it, gather only the outside leaves.

In our fruit garden, it is hardly time as yet for the full apple-gathering, and yet, as we know, there are some sorts that come in early and are ripe even by August. Their scent in a great measure guides us as to their condition, but if you have a good tree about whose properties you are at all in doubt, take from it one of the apples and cut it open. If you find the pips are turning colour, you can very safely gather your tree within a week or so from that time; but if the pips are quite white, let them hang for some time longer. To most of us this can hardly be called information, but do not our failures and ill-successes very often result as much from thoughtlessness, or it may be from idleness, as from want of knowledge? Your wall-fruit, on the other hand, cannot remain too long on the tree to ripen. It frequently happens, even on a comparatively small tree, that the fruit does not all ripen at once; often a fortnight will elapse between the ripening of two or more peaches upon the same tree. A peach or nectarine or plum if ripe comes off easily when touched. If much resistance is offered to the hand, you may be pretty sure that the fruit might be allowed to remain on the tree some little time longer. And yet it is annoying to find, perhaps, after a squally night, three or four fine peaches and nectarines lying on the ground, and forming alike both table and chair and dinner service to a little company of slugs. To avoid this, then, some careful gardeners contrive a network forming a sort of bag that projects outward from the wall, and thereby the fruit is not bruised by the fall, nor is it so much exposed to be devoured by the slimy interloper, with whom, as with the audacious wasp and the cunning earwig, we have declared war to the knife. But with all our murderous designs, the enemy never appears to decrease much; there seems room for us both, and we are often compelled to be content to have it so.

THE WATERING-PLACES OF ENGLAND AS HEALTH-RESORTS.

BY A FAMILY DOCTOR.



THE amount of information I can supply on the subject of this paper must obviously be limited, but I trust it will be found good of its kind. I must set out by presuming that my reader is either an invalid, or at all events in such delicate health that rest and a change are to be recommended, and that a journey, either by railway or in some of the many excellent steamboats that ply up and down our coast, can be borne with a fair degree of ease. But independent of the blessings of rest and change, obtainable by a residence of a month or two at some of our beautiful and healthful English watering-places, one of course expects good to accrue from drinking the waters, to say nothing of breathing the air, of the spot chosen; and this leads directly to the question, "Where shall I go?"—a correct answer to which can only be obtained by a consultation with your medical adviser, and a consideration of the state of your balance at the banker's. With the choice of a watering-place I have nothing to do; and as regards the expense, I can only give you general advice. The expense, then, is divisible into that which must be contracted on the journey and that of the sojourn at the wells chosen. Take the wells

first. Having made up your mind as to the place to be visited, you will find it far better, far quieter, and cheaper to go into respectable lodgings than to reside at any of the hotels. The only drawback is the difficulty of securing rooms before you go there, and thus avoiding the necessity of landing at an hotel to live there while you "look round." There is one way of overcoming this difficulty which I have known tried repeatedly with success: it is simply to write directly to the "principal stationer" or "chemist" in the place, and state your requirements frankly, and in nine cases out of ten you will receive a polite answer. It is unlikely that you will be able to put a name on the envelope you send, but an explanatory note to the postmaster will render assurance doubly sure.

What you ought particularly to inquire about, before taking the rooms, are—1, the situation of the house; 2, its soil; 3, its water; 4, size of the rooms; 5, their exposure to sun or otherwise; 6, the class of houses in the neighbourhood; and 7, whether the street is a noisy one or not. You see I am very particular in catering for your comfort. I want you to have plenty of fresh air and pure water in-doors, with sunlight as well, and not to be exposed to the harassing, killing din of a noisy street. If the neighbourhood be not a respectable one, no matter how good the house is, you will be rendered miserable in a thousand ways.

An invalid going on a journey should not only write down on his tablets all information of the route and times of arrivals and departures, but he ought to have everything ready for starting a week beforehand, and a fly hired to take him from the terminus of his journey to his rooms, which latter ought to be in perfect readiness to receive him, with dinner or tea quite ready to serve. This is the acme of comfort, and depend upon it, if bustle and worry take the place of judicious arrangement, if you expose yourself to annoyances that a little foresight might have avoided, neither your holiday nor the drinking of the waters will do you much good.

Much cheaper, and also to my way of thinking much more comfortable than the railway, is it to travel by sea. First-class fare from London to Aberdeen, with a return ticket available for a month, only costs £2 5s. You are thinking about sea-sickness, are you? Well, I had not forgotten that; but during summer and autumn the sea is generally calm, and so there is very little *mal de mer*, and the coast-line all along is so charmingly lovely, that the little voyage makes a most delightful beginning to the short holiday.

When you arrive at your chosen watering-place, it will be as well, if you can afford it, to put yourself under the care of some medical man.

Now, if any good is to accrue from a short residence at any of our watering-places, the invalid must make up his mind to live there by rule: he must get up betimes in the morning, so as to get walking exercise and the benefits of the waters before breakfast, he must live on plain, substantial diet, and beware of intemperance in eating as well as in drinking. At nearly every one of the watering-places of our country, there are many objects of interest to be seen, and there are also many charming walks and drives; there is no need, therefore, for the invalid to be dull, but he must be careful not to take exercise to the verge of fatigue.

As to the actual drinking of the waters, one or two rules must be observed. For the first few days, only a moderate quantity is to be imbibed, and at no time is a very large amount to be taken, else evil results are sure to follow. Again, the water should be sipped slowly, not gulped down, after each glass a walk of fully ten minutes should be taken, and a considerable time should elapse between the drinking of the last glass and breakfast.

I will now mention, in no classified order, but just as they occur to me, a few of the ailments which a residence at some one or other of the wells might be reasonably supposed either to remove or to alleviate:—Dyspepsia in any form, general debility, chronic bronchitis or winter cough, *some* cases of asthma, constipation and the reverse, chronic dysentery, neuralgia, paralysis, liver complaints, scrofula, skin ailments, hysterical affections, low spirits and ennui, obesity, rheumatism, and gouty affections, &c. &c.

One of the pleasantest places in England at which to spend a short holiday is undoubtedly Tunbridge Wells. I am of opinion that as a residence for a time, for the feeble or debilitated of any age, for dyspepsia, and ennui, its merits are not sufficiently recognised. The place is extremely pretty, the air is dry and bracing, and it has an advantage over many, if I cannot say all, sea-side places—it has lovely tree-shaded walks. Indeed, the want of trees at our sea-side watering-places is one of their chief drawbacks. For young girls who suffer from lassitude and weariness, with headache, palpitations, and pains in the back, I think I do well to recommend Tunbridge Wells. The air probably will do as much good as the waters; but these latter should be taken, and, if the invalid's own physician thinks it right, iron in some form may be taken to increase their chalybeate effect.

Away up in the North of England, in the delightful county of York, and within about thirty miles of the city, if my memory serves me well, are the wonderful wells of Harrogate. There is quite a large number of these wells, and they are divided into the strong and mild sulphurous springs, the pure chalybeate and the saline chalybeate springs; so that what ailment soever of a chronic nature an invalid happens to suffer from, he can hardly go wrong if he goes to Harrogate. He will be sure to find a well to suit him, or it may be two, or he may be advised to use first one and then another, or on the other hand it may be deemed advisable that he drink of the chalybeate while using the sulphur spring as a bath. Again, there are two Harrogates, so to speak—High Harrogate and Low Harrogate—the former being 600 feet above the level of the sea; so the visitor can easily find an elevation to suit him. The place, like Tunbridge Wells, has a pure, bracing air, but not so dry a one. In fact, it has been called a humid place; but the soil

is sandy, and therefore the rain that falls does not lie long about. The season usually lasts until the beginning of November, but much depends upon the weather. The waters of Harrogate are all cold, but I believe are warmed before being partaken of; some of them, too, need to be taken with circumspection and not in too large quantities, or evil results follow. Some people are able to consume more than others: I mean to imply that it is not the quantity of water drunk that does the good, but the proportion of the tonic taken up by the system.

From Tunbridge Wells to Harrogate is a pretty long journey, but here we are south again, in one of the middle counties—Warwick, to wit—and in the beautiful town of Leamington, a very healthy residence for the invalid suffering from debility, whether general or nervous. The air is not unlike that of Harrogate; it is bracing and somewhat humid, but the waters are different. They are principally aperient waters, though some of the wells are chalybeate and sulphurous; they thus agree with people who suffer from inactivity of the liver and consequent dyspepsia.

Cheltenham used to be a place of very great repute as a watering-place, especially with former residents in India. If a mild sheltered winter residence be required, with wells, either alterative, or alterative and tonic, it is to be found at Cheltenham.

Bath is another watering-place, which I dare say a good many of my readers have been taught to look upon as old-fashioned. I have a very good opinion of it. The seasons are autumn and spring; the waters—which are thermal—are drunk twice a day, before breakfast and in the afternoon, and have a good effect in old-standing cases of gout and rheumatism, affections of the joints, and indigestion. The bathing arrangements are well carried out: in fact, they could hardly be better devised to suit all kinds of invalids.

Of Buxton, in Derbyshire, I have no personal knowledge, but as the place itself is high, and there are mountains around it, and as the soil is good and soon absorbs the rainfall, I can easily believe it is an excellent watering-place for any one requiring a bracing air with the perfection of baths. The season is from June to October, but after this the weather, I am told, gets cold and unsettled, and the winds often cutting.

The village of Matlock is, without doubt, a charming place, and so are the romantic drives in the vicinity. It is vaunted as a valuable spa; but if the springs possess no medicinal importance it is difficult to see where the value lies.

Pausing merely for a momentary glance at the bracing village of Purton, in North Wilts, which can be recommended to the rheumatic and dyspeptic as a cheap place, let us to town, and let us jump on board the good steamer *Granton*, at the Irongate Wharf, bound for the "land of the mountain and the flood." Behold we have tickets in our hands—return first-class tickets, that have only cost us thirty-four shillings; and just in about that number of hours we step on shore in Caledonia's capital. This in itself is no watering-place, albeit it is healthful and beautiful; but there are many charming wells in Scotland; some of which are far too little known, having merely at present a local repute.

Moffat, however, is pretty well known. It is suitable for many of the cases for which the waters of Harrogate are so justly celebrated. Many skin complaints yield to the waters of Moffat. The place is quite a fashionable resort, and no wonder; the scenery is wildly, romantically beautiful; the hills that surround the town are between two and three thousand feet high, and about the Vale of Moffat there are many charming walks. The well, or pump-house, is about a mile and a half from the town, but omnibuses go to it every morning. There are places of interest everywhere around, for at Moffat you are in the very heart of a classic land, where there is something at every turn to remind you of Scott, or Burns, or the Ettrick Shepherd—

"Who taught the wandering winds to sing."

You have doubtless heard that Scotland is a dear place to live in. This is a mistake. There *are* hotels where they charge high during the season, but these are the exception, and apartments and food are frequently much cheaper than they are south of the Tweed.

The Pitkeathley mineral wells, Bridge of Earn, are justly celebrated. Independently of the wells, the village is extremely healthy, and the scenery everywhere near it superb. It is, moreover, a cheap place, and easily reached. Perth is within easy distance; and this sweet town, I need hardly say, is the key to the Highlands.

Another pleasant little watering-place is the village of the Bridge of Allan, a few miles from Dunblane. A quieter or more charmingly picturesque spot you could not find, were you to search the wide world over. It nestles by the side of the winding Allan Water, in the midst of a country so famous in story, that I might almost say that every acre—certainly every hillside and every glen—can point to its battle-field. It has another advantage: it is close to Doune, to Callander, Stirling, and to the famous Trossachs.

Both the last-mentioned wells may be recommended to invalids suffering from debility, torpor of the system, indigestion, or from worry or over-work.

Those who suffer from dyspepsia, from rheumatism, or eczema and allied skin affections, might do well to take a journey still farther north, and visit the wells of Strathpeffer. The journey by rail along the Great Highland Railway is rich in the wildest scenery, while all around Strathpeffer the country is indescribably grand and romantic. I must throw down my pen, else this paper may begin to read like a page from a guide-book. I have brought my reader as far north as I can, and there I must leave him; but if he has not forgotten his favourite poets, his sketch-book and fishing-rod, he cannot think the time long for a month, at all events.

MAJOR GODFROY'S DISCOVERY.

By FRANK BARRETT, Author of "Hidden Gold," &c. &c.

CHAPTER THE TENTH.

PREPARATIONS.



AS the major's ideas condensed into a definite plan he felt the increasing necessity of more correct measurements and truer circles than were to be made with lengths of string and inverted glasses. He had no compasses, and such instruments were not to be bought in Andely; the only means of supplying the want immediately was through M. Ste. Marie.

M. Virton Ste. Marie was the kindest and most cheerful man in Andely. He never refused to do a service for any one, and was the first to offer help to those who needed it. His generosity kept him poor, though he worked harder than most of his countrymen. It behoved him to be a man of many parts to keep his accounts balanced at all. He kept the "Café des Fleurs," which stood on the east side of the Place, facing the "Chaîne d'Or," and in the summer had enough to do to serve his customers, to arrange fêtes, and conduct the balls held in the vine-covered salle behind the café; but in the winter, when there were neither customers to serve nor festivities to order, he turned his hand to other matters—mending locks, carpentering, and turning reels for the silk factories, besides travelling round the country once a month to get orders for oil, coffee, spices, soap, kirsch, or anything else for which he could obtain an agency. He had rendered many services to the major since his arrival: going to sales to purchase the furniture he required, fetching wood from the forest and storing it in his grenier, drawing and bottling his wine, pressing the apples for his cider, and the rest.

As the summer season was not yet ended, the major found M. Ste. Marie chatting with a customer in the café. M. Ste. Marie bustled about immediately to find what was required.

"Nom d'un chien! where did I put them?" he exclaimed, rummaging the drawers in his bureau.

"What do you seek, Virton?" asked M. Montier, looking up from his journal at the other end of the room. Ste. Marie explained.

"Is it a large pair that you want?" M. Montier asked, crossing the room. "What purpose are they needed for?"

"I want them for drawing a mechanical contrivance," said the major.

"Ah! it is monsieur who requires them," M. Montier said, bowing; then taking a small pair from his waistcoat pocket, he asked if they would serve.

"Admirably—if I may presume to borrow them until to-morrow," answered the major.

"I shall lend them to you with great pleasure. I have not used them since I invented my clock that was exhibited in your Exhibition, monsieur, and I have carried them in my pocket ever since, as a warning to invent no more."

Major Godfroy looked at the little man in his thread-bare suit of brown with interest. Here was an inventor who had not profited by his invention—possibly because it was not of sufficient public importance. Nevertheless, his practical knowledge of clock-making would enable him to solve certain difficulties which passed the major's untrained comprehension.

"I am afraid by your remark you were not fortunate with your discovery?" he said.

"I was fortunate in making a clock such as had never been made before, but I was unfortunate in not properly guarding myself from imitation. It has always been the case with discoverers: they give their brains to the world for others to profit by. Is your invention in the nature of a clock, monsieur?"

"No. My discovery——"

"Pardon, messieurs!" said M. Ste. Marie, stretching his arm across the table to take an empty coffee-cup, and at the same time giving the major the benefit of a significant wink and frown.

"Monsieur was saying that his discovery——" said M. Montier interrogatively.

"Yes—that my discovery has nothing to do with clocks," the major replied nervously.

M. Ste. Marie, standing behind the inventor of clocks, nodded and smiled approval of the major's evasion.

"It is possibly some improvement in steam machinery. Monsieur is an engineer?"

"No," the major answered, rising from his seat, perplexed and alarmed by Ste. Marie's signs.

"Under any circumstances, I shall be glad to give you the benefit of my experience. I can put you in the way of protecting your invention from imitation. You cannot be too much on your guard. There are a set of men always on the alert to appropriate the thoughts of cleverer men than themselves."

"Thank you," replied the major. "I believe I am quite capable of protecting myself." He received an

approving nod from Ste. Marie, and continued: "And now that I come to look at the instrument you kindly offered to lend me, I perceive that it is not exactly what I want." He handed the compasses back to their owner as he spoke, for he could not accept any favour from one that he suspected.

"Eh, well! I shall do myself the pleasure to call upon you, and if you require any models executed, I trust you will think of me as one who may be implicitly trusted," said M. Montier, restoring the compasses to his pocket. The major made a somewhat stiff bow, and withdrew. He was walking slowly across the Place homewards, when M. Ste. Marie overtook him.

"Pardon, monsieur!" he said in a low tone. "You did not quite understand my signs."

"Not quite, indeed," answered the major. "I understood only that for some reason you wished me not to trust the man who offered me his compasses."

"Precisely; and I will tell you why. M. Montier is a pleasant man, agreeable and clever, but if you have a secret, he is the last man in the world you should trust. The clock he spoke of, which he exhibited at your Great Exhibition, was the invention of the man he served in Paris as a servant. Unfortunately for M. Montier, his master had taken out patents for his clock, so our friend had all his trouble and expense for nothing. Since then he has been on the look-out for another invention which he may apply in the same manner, but with better success. You must not trust him."

"Are all men liars and thieves?" exclaimed the major bitterly.

"Too many of them, I am afraid, when they are not controlled by the fear of discovery and punishment. I do not know what discovery you have made. I beg you not to tell me, for I know not but that I might be as bad as others with temptation in my way; but if it is valuable, I advise you to let no one see it until you have secured it by a patent. Keep it to yourself—make your own models—look at every one as a would-be-thief if you wish to reap the benefit of your own thoughts."

It was in consequence of this advice, supported but too strongly by his own bitter experience of mankind, that the major before the end of the week agreed to take the island of Madame Gaudry. As he looked again on the space enclosed by the great walls of the old castle that had stood there, he said to himself, "Here at least I shall be secure from observation. I can make what experiments I please in safety; no one will be able to rob me." It was an additional advantage that Doris would find ample amusement and healthy occupation whilst he was working. The child herself was delighted with the prospect of this romantic dwelling-place, and only regretted that at least three weeks must elapse before the change of residence could be made.

Major Godfroy told Ste. Marie what he proposed doing.

"Good, good!" exclaimed M. Virton earnestly. "This is wise, excellent. You will be safer there from—from intrusion, interruption—and from our good friend M. Montier and his fellows. Good! And it is necessary you should have a place for your experiments, which your little house could scarcely be fit for."

"My experiments must be in the open air."

"There it is then, monsieur. What experiments could you make on the land without discovery? None—absolutely none. Whereas, within that enclosure, with its high walls, you may do what you please secretly. And now let us think what you will want. In the first place, the house must be cleaned and painted for the sake of the little one, if not for your own comfort after the day's work. And perhaps for her also you will keep a cow and poultry; it is good for a child to have living things about, and doubtless she will not see much of you during the day, poor child!"

"Yes, yes. It is considerate of you, M. Ste. Marie. I fear I am forgetful too often of the immediate welfare of my dear little one."

"Mère Duval is an honest old woman, and knows well all about farm matters, so she can look after the cow and the garden, and your cuisine as well. There is nothing to fear from her. Women don't care for mechanics, and, moreover, she cannot climb your great walls if she wished to. You have two boats. She can have one to cross to and from the island; and in the season you can spare a week for a holiday while you employ men to gather the fruit. I myself will see to that, if you will."

"You are very good."

"No. I shall take payment for my work, monsieur, so the obligation will rest on both of us, or neither, as one likes to put it. As for the house, I would advise you to paper the walls and have carpets over the tiled floors."

"May I engage you to undertake all that is necessary in that respect?"

"I shall do it with pleasure, and you will not find my charge extortionate. I will see to the work at once, for the rooms must be dry and comfortable before you enter with the little one. And while the workmen are about, it would be a good time to clear the farm-yard, and have the manure dug into the garden. The apples will not be ripe for another month fully, but all the fruit within your enclosure may be cleared away."

"Yes, yes."

"We will get all this done quickly, for you are doubtless anxious to begin."

"I regret every day that passes unused."

"Just so; and it will be well for the little one to enjoy the fine weather. She will find it very dull in the winter. But you will permit her to cross sometimes, perhaps, and you may be sure she will be welcome whenever she comes. All the world loves her. And now we have thought of her chiefly, let us speak of your affairs and needs. I am not inquisitive, but I must know something that I may be of service."

"I shall be glad to tell you," the major began, his instinctive trustfulness overcoming his suspicions as gratitude warmed him towards Ste. Marie.

"No, no," interrupted Ste. Marie with a deprecating gesture. "I would know nothing; I am tolerably good now, and I want to continue so. Answer me 'Yes' or 'No' simply. It is a machine you have invented?"

"Yes."

"It is large?"

"Yes—possibly it will be the size of a locomotive engine. But it is necessary to begin by making models. I do not expect to succeed with the first attempt. On the contrary, I anticipate many failures—years and years of patient work before I achieve success."

"You have reason to believe you will ultimately succeed?" asked M. Ste. Marie, his curiosity getting the better of his desire to know nothing.

"I am positive of it. I feel as confident as any man may feel who has failed hitherto as I have."

"Years and years—it is long. Will it repay you?"

"It must make me the greatest man that lives; for this invention—the discovery realised—must revolutionise society. It is doubtful if wars could be possible with the existence of my apparatus. I have tried to calculate the extent of power the possession of this instrument would give to a nation, and failed to see the limit. It must make one nation of the world, since none could oppose the force of that which possessed it. In civilising the peoples, it must eclipse all the inventions that have preceded it. Electricity, steam will appear but as the glimmering light which touches the earth before the sun rises; my discovery will make an era in the history of this planet from which progress will date."

The major has risen to his feet, his face flushed; his eyes seemed to glow with the fiery advent of the era he prognosticated, the veins stood out in purple cords upon his white temples, and he spoke with the utterance not of a simple unfortunate gentleman, but the eloquent conviction of a prophet who sees into the secrets of the unknown.

In diametric contrast to the major's tall, thin figure and impassioned visage, sat short, fat M. Ste. Marie, his full eyes threatening to drop from their sockets in the surprise with which he regarded one so moved whom before he had seen only calm and composed.

As the major ceased to speak, and yet dwelt in thought upon that marvellous future which was to come, M. Ste. Marie drew a long breath, and tried to look as if nothing had occurred to astonish him. He had combated the popular opinion that the major was weak-witted with consistent belief in his own view; but now he felt that he could maintain that idea no longer. Clearly the man who talked like this could not be in his right senses. However, it was not for him to desert him on that account.

"A machine of that kind would require a good many wheels," he said, going on to the practical part of it.

"Not many," answered the major, cooling down to his ordinary temperament.

"Spindles and cranks as well, perhaps?"

"Yes, probably."

"Then you ought to have a workshop to make them; for you may be sure if you got a man to make them for you, he would want to know what they are for; and if you told him only half as much as you have told me, he wouldn't rest until he had found out."

"That is very true. I must have a workshop."

"To make wheels you must know how to turn them. Can you turn?"

"No; I must learn."

"I will give you some instruction. There is my lathe at the back of the parlour."

"I must buy a lathe."

"Yes. And to make spindles and cranks, bolts and worms, you must know how to use a forge, an anvil, and a vice."

"Yes, yes; I must learn all that," the major said, looking into vacancy.

Ste. Marie scanned his silky skin, delicate nails, and speckless clothes, and observed in a quiet tone of warning—

"You will find it dirty work."

"What does that matter? Can any price be too high for the achievement I have in view? When I first turned my thoughts to this discovery I fixed my hopes on gaining half a million of francs—not for myself, but for my child. For that I would have done all that a man may honestly do. But now that sum sinks into petty insignificance beside the tremendous benefit to mankind that must result from my success."

"Pauvre petite bête!" murmured M. Ste. Marie, thinking of Doris, when the interview was ended and he left the major.

Whatever opinion M. Ste. Marie might privately entertain as to the perfect sanity of Major Godfroy, he said nothing which might lower the world's esteem of the English gentleman. It was necessary for the sake of Doris that people should respect her father. He was kind to all, but he loved children; and for Doris, whose isolation he foresaw, he felt the profoundest pity, though he was careful to conceal his feelings. "If she thinks she is to be pitied, how can she be happy?" he asked himself; "and if every one greets her with sighs, and speaks of her father as a very unfortunate gentleman, she is likely to be sad indeed, alone on that island with him."

So he gave people to understand that the major was vastly wiser than he seemed, and that in due time he would astonish the world, and take his place among the great men of the age.

Madame Gaudry had not left the island when M. Ste. Marie and his workmen made their appearance, and the work of alteration commenced. A barn built against the great wall of the enclosure was cleared, fitted with proper lights, and converted into a convenient workshop; a door was made in the wall, and this was the only means of communication with the enclosure, all other openings being built up with solid masonry. The boats were in hourly requisition to carry things across to the island. Forge, anvil, lathe, bench, hammers, chisels, iron in rod and bar, pieces of wood hard and soft, with all the necessary

tools for shaping it, were taken over, for the workshop, and then furniture and appointments for the house.

While these preparations were making, the major, in the shed behind the salle de danse of the "Café des Fleurs," was learning to turn at M. Ste. Marie's lathe, and struggling with the difficulties of treadle and vice.

Doris followed M. Ste. Marie about wherever he went, and watched the course of events with the utmost delight; and when it came to arranging the interior of the house, and her advice upon certain details was gravely asked by the busy M. Ste. Marie, and acted upon, she felt that she had arrived at the happiest moment of her existence. She was too young to analyse her feelings; no momentary dread of the future lessened her enjoyment; she was happy, and saw nothing but happiness before her.

CHAPTER THE ELEVENTH.

LIFE ON THE ISLAND.

ALL the alterations and arrangements were finished before the end of August. M. Ste. Marie, with the workmen, had left, and only Mère Duval shared the solitude of the island with the major and Doris. Presently she came from the house, with the leisurely pace of one who has finished a good day's work. Doris and the major were sitting by the steps where the boats were secured, and they saw the old woman coming across the orchard in her short jacket, her blue apron, and snowy-white cap. Doris gave a sigh of relief. "Here comes Mère Duval at last; now we shall soon be quite alone," said she.

"Which boat would monsieur have me take?" asked Mère Duval.

"Which you will."

"I will use the black one; it has a good broad flat bottom, and is better for rough usage than the painted one. Has monsieur any commissions for me?"

"None whatever."

"Ah! well, then, I will go. I have left everything quite tidy and proper. The cow is fed. I will be here to-morrow by six o'clock. Good evening, monsieur and mam'selle. Good evening and good night!" The old woman stepped into the boat, put out the long oars, and with another parting salutation pulled into the current with short sharp strokes that kept her head to the stream, and carried her in a straight line across to the quai under the "Chaîne d'Or." They watched her fasten the boat, ascend the steps, and disappear by the little street that led to her home; then Doris slipped her hand under her father's arm, feeling somewhat awed by the sense of their entire isolation. Not a living creature was to be seen, not a sound broke the stillness of the evening; the river itself was noiseless in its rapid flow.

"The grass is getting damp. We will go in now, Doris," said the major. So they rose, and walked slowly through the orchard to the house, catching glimpses of the water that yet reflected the lingering tints of sunset through the ragged growth of briar and bramble that edged the island.

Doris went to her room at once, for she was tired with the excitement of the day, and wished to be up and dressed before Mère Duval arrived in the morning, that she might feed her rabbits and poultry without interference or help from the busy old woman; and when, ten minutes later, the major went in to bid her good night, he found her asleep in her little bed. He bent down and kissed her brow lightly with a silent benediction; then he took a light into his workshop, and holding it over his head, looked around him. There stood the forge, with its brown leathern bellows yet unsoiled, the lathe unlittered with chips, the undented anvil, the square work-bench and sharp-edged vice, the bright tools regularly placed in racks by the wall—all untouched, untried, and their very use as yet unknown to him.

He would have quailed before the difficulties thus suggested to his mind, would have dreaded the countless failures and disappointments before him, had he doubted the ultimate success of his patient efforts. But no such fear daunted his spirit. He was perhaps blindly self-reliant. He was not dismayed when, setting down the light, he lifted a sledge-hammer, and knew that his delicate hands must become tough and hard, and the muscles of his arms gain power, before he could wield it with force and accuracy. To use such tools was merely the possession of knowledge, which could be attained by strenuous learning. What other men had done he could do. It was a question of time only, and his work had not to be accomplished for nine years. His soldierly instincts supported him against despair. It was as if the order had come to him to take a battery. Unquestioningly, and with bold reliance upon himself and God, he must advance and take it, whatever odds opposed him. He waited only with impatient eagerness to make the attack. He was tempted to begin at once—to light the forge, and beat a piece of hot iron into shape; but with the precision of military discipline he had regulated the hours of his work, and nothing could swerve him from following the rules he had laid down. These rules, short and concise, were written upon the last page of his diary, and ran thus:—

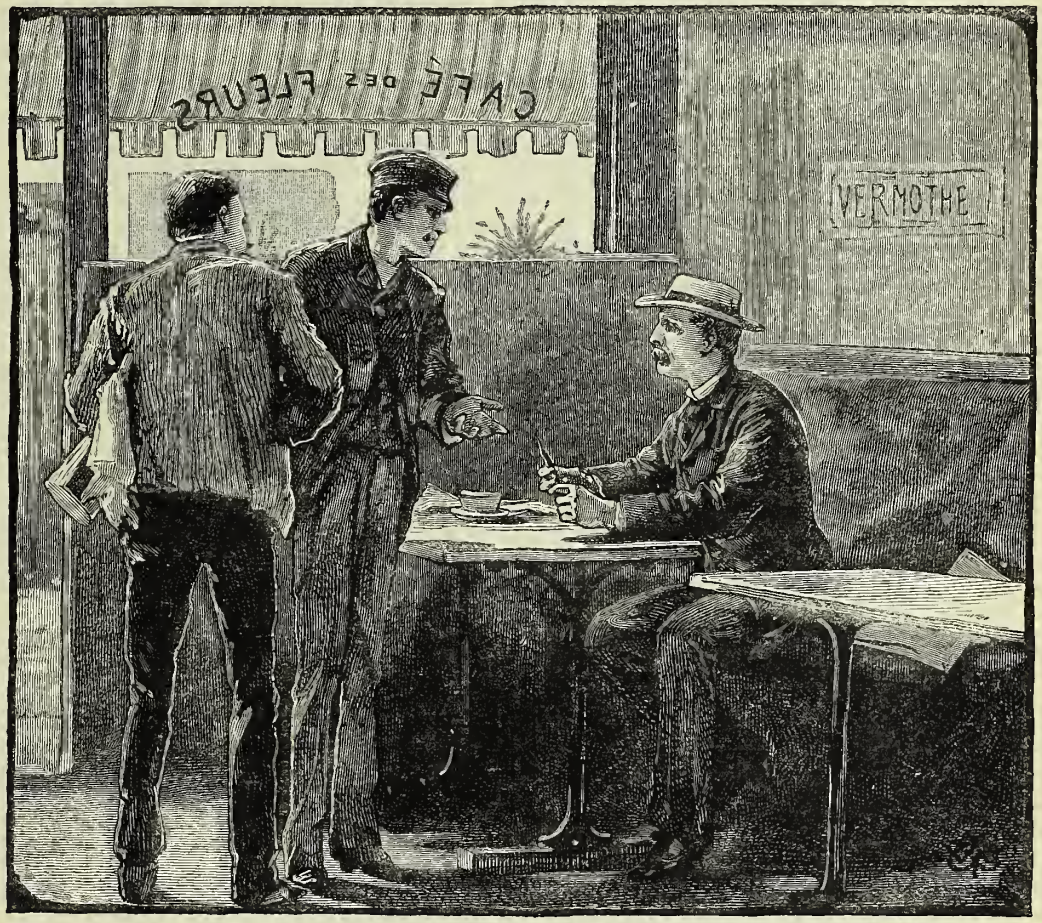
5.30 a.m., Rise. 6, Work. 7.30, Breakfast. 8.30, Walk round the island, and give necessary directions to Madame Duval. 9, Instruct Doris. 11, Lunch. Midday, Work. 6 p.m., Dine. 8, Write Diary, &c. 10, Rest.

He lingered in the workshop, passing from one object to another with grave scrutiny, until the clock of the church in Andely struck eight, then he re-entered the house, wrote his diary, read two chapters of "Mechanics," and precisely as the clock chimed ten went up to his bed-room.

It was not the voice of the lark which awoke Doris the following morning, but the sharp "clink" of the vice-lever, followed by the hoarse rasping of a file; and as she heard the lusty crow of a cock, and saw by the full light that the sun, which she had intended to see rise, must have been up some time, the disheartening conclusion came upon her that she had overslept herself. Yes, there could be no doubt about it; she could hear Mère Duval's sabots clattering

about the tiled floor of the room below. And she had made up her mind to rise so early—before papa, even—to open the fastenings of the windows, and be ready at the steps to tie the chain of the boat when Mère Duval arrived. She was ready to cry with vexation as she conjectured that the officious old woman, who wanted to do everything, had fed the poultry and her rabbits, and turned the goat out into the orchard. As the distant clock chimed she stopped in the midst of washing to listen. It was the first quarter, and into the yard, calling to her fowls. How hungry they were! Probably they had never before had such a breakfast as she gave them that morning. She was compelled at length to leave them to help themselves from the panier, for other pets needed her attention.

"Poor Nanny! are you almost tired of waiting for me?" said she, approaching her goat. The animal answered by a piteous bleat, and ran willingly to her side as she unfastened its chain from the wall of the



"HE HANDED THE COMPASSES BACK TO THEIR OWNER AS HE SPOKE" (*p.* 610).

could not possibly be after seven, so there was yet hope that Mère Duval had not forestalled her in all the delights of being up early. She finished dressing, and ran down-stairs in haste.

"Good day, my little one. You have not waited to be called this morning," exclaimed Mère Duval in her high shrill voice, as she knocked her broom about in the corners of the salon.

"I want to get up early every morning. Have you fed the fowls yet?"

"Me? No. Gourmands, they feed themselves."

"Nor the rabbits?"

"All in good time. I will feed them presently."

Without waiting for further argument, Doris ran out barn; but when she tried to lead it to the orchard, the ungrateful beast first butted at her legs, and then, dragging the chain from her hands, scampered off in the opposite direction; nor was it until Mère Duval came to her assistance, with a stick in one hand, a stone in the other, and a string of shrill objurgations flowing from her lips, that Nanny would listen to the persuasions of Doris, and permit her to recover the end of its chain, and lead it into the orchard.

"And now, my child, the chocolate is ready, and I am going to tell monsieur," said Mère Duval.

"So soon? And my rabbits have had nothing. Wait five minutes," said Doris coaxingly.

"Not a moment. Monsieur has said, chocolate at

half-past seven, and if it is not ready Mère Duval must answer for it."

Doris answered only with a sigh of regret, casting her eyes towards the boarded cavity in the outside of the great wall, whither the rabbits had been removed from the interior of the enclosure, and where she could see the tops of their ears pricked to catch the sound of voices.

"Yes, Mère Duval must answer for it," pursued the old woman, looking down at the little face of her "ma'mselle." "But Mère Duval has good broad shoulders, and can bear a scolding for once, so run away; but don't be long, little one."

Doris hesitated a moment, her heart divided between tenderness for her hungry animals and generous consideration for Mère Duval; then her sympathy for the weaker predominating, she sped away, threw a great cabbage to her rabbits, and without waiting for the pleasure of seeing them eat, ran back to the house, getting there almost as soon as Mère Duval.

There was a pungent fragrance of burning apple-wood in the kitchen, the simmering milk sent up a rich wholesome smell, on the white table were set two white bowls, and beside them long brown rolls, and a pat of yellow butter on a green vine-leaf. Until she smelt and saw these good things, Doris did not know what a sharp appetite she had. As yet she had not found time to look at the scenery, but as she washed her hands, she looked through the window of her bedroom, from which she could see Château Gaillard and a long reach of the Seine. The sun was high over the hills, but a thin veil of mist still hung over the river, and softened the distance. One could see the little village of Tosny just peeping above the grey line, with its brown pointed gables and church-spire. There was no wind; even the aspen-leaves were still. A fisherman was dropping down the stream with his net suspended to four sticks. The water looked like a real mirror, and reflected the hills exactly, with the dark oak foliage, and thin graceful stems of silver birches. All looked like Paradise to the child's eye, and she saw no end to the happiness she felt. To be sure, the winter would come; but then, would the hills look less beautiful clothed in white snow? The river would be frozen quite hard, and it would be bleak perhaps out-of-doors; but how delightful to run in and sit before the crackling wood fire! These dreams were interrupted by papa's voice below. He was asking Mère Duval if his child had yet risen.

"Yes, here I am," Doris answered, running downstairs; "and I have been up quite a long while, and I am so hungry."

How odd papa looked! She had never before seen him but in his black, closely-buttoned frock coat, or grey morning dress, with white wristbands falling upon his beautiful soft hands, and now he wore a blue blouse such as *ouvriers* wear, his hands were black and burnt, his face was red and beaded with perspiration. He laughed at her astonishment, for he also was in high spirits. What had he achieved? He had filed off a piece of bar iron and beaten it into a circular form—clumsily enough. The product was useless, but the work had its value. He sat down to breakfast in his ordinary dress, and his hands bore no signs of his work beyond a black mark on his nail, the result of an ill-aimed blow with the hammer, and a red scar on his thumb, caused by an unlucky slip of the hot iron. These signs were not displeasing to him: as a soldier, he was proud of his scars.

Doris and he ate with equal heartiness, and afterwards they went out together to walk round the island, Mère Duval following, to take her orders and offer advice.

"Something must be the matter with those fowls, I fear," said the major, looking at the birds, who were standing in a melancholy group, with ruffled plumage and languid eyes. "Have they had anything to eat since we came here?"

"I left the basket half full, and they've emptied it," said Doris, looking into the empty pannier.

"Hei, hei! Off with you, lazy gourmands! Fly, fat rascals!" screamed Mère Duval, seeing the direction of her master's eyes without understanding his words, for he spoke in English; and she threw a stick at the red and brown cock as the responsible representative of the family.

"I wish Mère Duval wouldn't be so cruel to the poor things," said Doris as the cock leaped high in the air, and then, followed by his less energetic covey, scuttled off into a place of safety, from whence he could crow defiance with security. "And I wish she would wear her white cap, and not that horrid handkerchief tied round her head."

"Monsieur will do well to kill off some of the lazy, good-for-nothing things; they eat the eyes out of their heads," said Mère Duval.

"Oh, no, no!" cried Doris. "They are all my children, and if you kill them or beat them, I will not speak to you, Mère Duval."

"Well, well! It is good for children to love live creatures, but when one gets as old as Mère Duval, one prefers eating the fat vagabonds to looking at them."

They walked round the island slowly, the major listening to the old woman's suggestions as to the cow, the gathering and storing of the apples already ripe, the disposal of wall-fruit, the cultivation of the garden, and other matters of domestic economy, and Doris silently imbibing the constantly revealing delights that met her senses as they proceeded. Then they entered the house, and sitting by the open window, the major and Doris went through the routine of study he had arranged for her. It was hard work that day for both to fix their minds upon the lesson, with the continual pressure of other subjects upon their thoughts. Rabbits and wild flowers came between Doris's eyes and the sum she had to work out, while the major in thought stood among his tools in the workshop as he mechanically corrected the child's mistakes. How aggravating it was in the stillness of that room to hear the clinking of milk-pails and pans outside, and not to be able to see what Mère Duval was doing in the dairy! It was a sweet relief when these sounds were exchanged for others in the kitchen. The crackling of

wood, the rattling of delf and cutlery, and then the hissing of a fricassee told that lunch was being prepared and the hours of study coming to an end; at last the long-expected hour chimed, and she was free.

At twelve o'clock the major entered his workshop, and locked himself in. The light came from above and through the door opening through the great wall into the enclosure. He was safe from observation or interruption, and here he worked in the heat of that autumn day at his forge and anvil. When he laid down the hammer, and left the fire, to wipe the perspiration from his blackened face and rest his aching muscles, his mind worked on. With a piece of charcoal he drew upon the white-washed walls rough diagrams which in themselves merely represented the means of obtaining certain mechanical motions by sufficiently well known methods, but which, taken together, suggested the purpose of obtaining motion by opposing forces. An engineer would have laughed at these drawings and the major's clumsy, roundabout way of procuring the result he desired; he would have rubbed out all these diagrams, the outcome of nights and days of careful thought, and in two minutes have sketched a simpler and better means. All that Major Godfroy knew; but he knew also that the purpose to which these movements were to be applied was one which had baffled the skill of engineers, and which he alone could effect. "By the time I can make my machinery I shall have solved the minor difficulties of putting my wheels in their proper places," he said, as he returned to his manual work.

He was fatigued when he left his workshop for the day; but as he sat beneath a widespread apple-tree in the orchard, whither Mère Duval had carried chairs, table, and the cafétière for monsieur, he felt more content, happier and more hopeful than he had been for many months. He rested his arm upon his knee, and looked down at Doris, who sat upon the grass at his feet, the unconscious object of his past fears and present hopes, stroking the long silvery ears of a drowsy rabbit in her lap. Looking up, she asked, "Will every day be as happy as this, papa?"

"We will try to make them so, dear," he answered, passing his hand tenderly over her head.

CHAPTER THE TWELFTH.

PROGRESS.

THERE was little change in the habits of the dwellers on Ile Content during three years, beyond those brought about by the varying seasons. With vigorous precision the major rose, worked, instructed Doris, worked again, and rested at the hours fixed in the commencement; and Doris found amusement in solitary wanderings about the island, and in associating with her pets, which increased and multiplied to a delightful extent, as the natural consequence of her objection to having any killed or sold for slaughter. The novelty of her new life wore off, but happily her pleasure in its circumstances diminished nothing. Yet no human character remains changeless; and both Doris and the major altered, though the change came by such slight gradations as to be imperceptible, or nearly so. Mère Duval knew that mam'selle grew —that every season necessitated longer stockings and easier shoes—but she could not say for certain that she was less happy or childlike than she had been. She was thin, to be sure, but then, what could one expect of one who grew so quickly? Was she not already as tall as Mère Duval herself? And she was healthy and strong, and quick as her own goat. Of a truth, she read too much for a child of her age, and was fond of solitude; but that was only natural with a father like monsieur, who never went to cafés nor fêtes like other men, but found greatest pleasure in work that spoilt his hands and soiled his clothes, who was exact in everything like a clock; and mam'selle had ever been quiet and silent.

These particulars she gave in reply to questions of M. Ste. Marie, who could not think of the isolated child without grief. It was absolutely wrong, he said, that a young girl should have no companions but beasts and birds, that she should not sing and romp and dance like other children, and enjoy the exuberant gaiety of youth. For monsieur it was a different matter; he was no longer young, and if he chose to play the same tune over and over again every day, and all days alike, like a real hurdy-gurdy, it was no matter; but for a child the monotony was not well, and should not be.

"Ah, well! those who know should teach," said Mère Duval in reply.

M. Ste. Marie took the hint, and shortly afterwards crossed the river, and boldly spoke his mind to the major, concluding with the proposal that Doris should go to a day-school at Grand Andely with his niece, who would be a good and kind companion for her. Major Godfroy accepted the proposal gratefully when he had spoken to Doris on the subject and made inquiries respecting the school, for he saw that it would be greatly to the child's advantage, and he felt, now that his physical power was stronger, and the time for the accomplishment of his task growing less and less, that he ought to devote more time to work.

And so Doris went to school, and commenced a new era in her life. The influence of variety, of association with children of her own age, was marked, and speedily manifested. The young bird tasted the breath of spring, saw buds peeping where all before was bare, detected the coming of a warmer, freer life, and, shaking off her broodiness, burst into song. Mère Duval was astonished to hear her laugh a long tinkling peal as she came along the quai, with two dear friends on one side of her and three dear friends on the other; a subdued murmur of pleasure over her rabbits or chicks was the nearest approach to merriment she had been accustomed to. Doris was a great favourite. She came to school with more *sous* than any other girl, and she never saved one nor spent one without there was some friend to share her pleasure: that, undoubtedly, had much to do with the love of her companions, and their eagerness to take her arm in walking from school. But there

was a more solid reason for her popularity in her sweet temper, her gentle kindliness to the meanest and poorest of her companions, her vivacity and fun, and in her graceful prettiness.

Mère Duval rowed her to the quai in the morning, and was patiently waiting there when Doris returned from school in the afternoon ; but after awhile Doris took the oars, and showed herself as expert as the old woman, and considerably more active.

The major was pleased to see the difference in his child, for, although he saw her only in her quieter mood, the change was too obvious to escape his attention, despite the pre-occupation of his thoughts ; and one day he made a formal visit to Ste. Marie to thank him for his good service.

"I will not accept thanks, monsieur," exclaimed the good-natured little man, "for I have done nothing but what gives me pleasure. One engaged as you are cannot see as others do. You accepted my advice—that is a compliment. Some men would have told me to mind my own business. For the rest, it is a true pleasure to look at Mademoiselle Doris. She is good, and she is like a beautiful picture. Ma foi! it is no wonder that all the world loves her. And now, monsieur, how goes the work?"

"Well, quite as well as I could expect. I can use all my tools fairly. I give myself until the end of this month to finish learning, and I begin the new year by making a model of my apparatus."

"Then I shall hope to hear of your success before long?"

"I do not expect to succeed in the first attempt. If I get a reasonable proof of my accuracy in four years' time I shall be content."

"Tiens! tiens! tiens! tiens! tiens!" exclaimed M. Ste. Marie, opening his eyes until they were as round as astonishment could make them. "Well, such patience is droll. Are all Englishmen persevering like that?"

"Many of them, I believe."

"Ah! it is the effect of climate. One must have much patience to live always in a fog. Tiens! tiens! That will make seven years. Nom d'une pipe! Our friend M. Montier will grow tired of waiting."

"M. Montier," the major repeated, his long solemn face contrasting oddly with the twinkling merriment on Ste. Marie's round visage.

"You must remember him, monsieur—the watchmaker who invented his master's clock, and was so anxious to assist you with your invention."

"What of him?" the major asked, with quick earnestness.

"Oh, poor man! he comes to the café every Sunday to ask if you are nearly finished, and I tell him to wait patiently. It is not a mere clock you are inventing, but something that requires brains in the doing." M. Ste. Marie laughed heartily, and bent down to pat his dog.



"WITH A PIECE OF CHARCOAL HE DREW UPON THE WHITE-WASHED WALLS ROUGH DIAGRAMS" (*p.* 615).

The major felt serious; not a muscle of his iron face was moved in mirth. He looked at the dog Ste. Marie was rolling over—a strong, muscular, black-and-tan bulldog, with a short upper lip that revealed strong white teeth within. "Is that your dog, M. Ste. Marie?" he asked.

"Yes—Gum—a real *boul dogue*. Look at the great teeth in his mouth, monsieur, and the muscles of his legs and chest. He is as strong as a wolf, and yet he is gentle as a lamb."

"But a good house-dog. He looks as if he could be savage."

"Ma foi! yes. He would tear any one to pieces who dared to enter the house in my absence."

"I should like to buy such a dog as that," the major said, after a few moments' reflection.

M. Ste. Marie promised to endeavour to find what the major wanted, and shortly afterwards they parted, the major walking away with his hands folded behind him, and his eyes on the ground in unquiet cogitation.

He had for a long while enjoyed a sense of security on the island, and under its influence had gradually lost the dread of being robbed, which had been his chief motive in seeking seclusion. M. Ste. Marie's hint—dropped rather in jest than in earnest—revived in a moment all his old distrust, renewed his fears, and opened his eyes to the danger into which too-careless confidence was leading him.

"Shall I never have prudence?" he asked himself. "Have I not lost enough, wrought mischief enough, by my heedless faith in the world and those who appear to be honest? Mère Duval seems to me honest; but what proof have I that she might not be bribed to reveal what secrets she could discover in my workshop? Poor Maud was truthful, the lawyer Garton was upright in my eyes, until I found they were false and dishonest. Mère Duval might have entered the workshop twenty times within the last six months while I have been dining; and though the sketches on the wall, the wheels upon my bench, the levers and cranks lying about, may be unintelligible to her, they would have significance to a clever mechanic like Montier, and give him the idea to work upon. In future the door shall be unlocked only when I pass in and out. It is not probable—it is hardly possible—that anything has been already discovered, for all the diagrams and parts are disconnected; but the danger is imminent from the moment I work to complete my model and put the parts together."

From this day forth he guarded his privacy and laboured with a vigour that increased as his work proceeded. Doris, who had found pleasure in seeing the bright sparks fly from his anvil, was excluded from the workshop, for he did not wish to load the child with the secrecy he found so burdensome, and he feared that her inadvertent observations might lead to discovery. The dog which Ste. Marie procured for him he fastened in the workshop at night; he neglected no precautions for insuring secrecy which his active imagination, goaded by fear, suggested. Hitherto his work had been beneficial to him—pleasurably occupying his mind and body, and giving him a zest for the hour of repose. The daily routine, obliging him to devote several hours to the education of Doris, had prevented his occupation from engrossing his thoughts unduly. But now it was different. The work itself was more trying; it was no longer an exercise of skill, but a creative effort, which continually taxed his brain. The difficulties, while they were merely of a manual kind, could be laid aside with the hammer and chisel; but now that they engaged his mental faculties chiefly, they were ever calling for fresh exertions. In the middle of the night he would dress himself, go down to his workshop, and try some new arrangement of cogged wheels or springs which had presented itself to his mind as he lay upon his pillow. There was no duty—now that Doris went to school, and found delight in young companions—to keep him from his pursuit, and anxiety to finish the model he had commenced kept him in his workshop from morning until night. Model after model he constructed with varying success. Sometimes he was constrained to leave the workshop, and pace backwards and forwards in the enclosure, avoiding the object which filled him with a frantic delight that seemed to threaten his intellect; sometimes a grave sombreness overclouded his face, and the eyes that before had glittered with maniacal brilliancy were dull and leaden, as if there were no mind to animate them. But no reverse had more than a transient influence upon him or made him doubtful of the future. The first clumsy machine that left his hands established his discovery. His expectations were fully verified, despite the rudeness of the means employed to prove his theory. It was no longer doubtful that his end was attainable. He had there in his hands a practical answer to the question which the keenest mechanics had abandoned as unanswerable. It remained to improve and improve upon his model, until he produced one capable of practical application to the uses of mankind.

As yet his task was not half accomplished; his scanty knowledge of mechanics was inadequate for his wants. He could make pinions and wheels; but the question now was, how to apply them to obtain a certain result. An ingenious man would have leapt lightly over the obstacles which he, by painful labour, had to set aside before he could advance. Conscious of his own defects, he felt the necessity of compensating exertion; and so his hours of toil grew longer as time went on, until in 1870 he was compelled to desist; his privacy being broken into by visitors whom he was powerless to exclude or expel.

END OF CHAPTER THE TWELFTH.

"ON TIDE DUTY."



THE old truth that one half of the world does not know how the other half lives, holds good even in Government appointments. The light-hearted clerk who bustles out of Whitehall or Somerset House at the exact stroke of release, chatting with merry comrades and hurrying home probably to a cheery circle of friends, has very little idea indeed of the life of the "tide-waiter." Very, very rarely does he cast a thought down the great river to the humble Customs officer, who also is, strictly speaking, a member of the Civil Service. And yet if arduous duties, long service, quaint sights, and the spice of romance be attractions, a little attention might well be bestowed upon this worthy. Very frequently the tide-waiter is an old army pensioner, who, from keeping guard on tented field or in barrack square, has come, by an odd turn of fortune's wheel, to do the same on ship-deck. His duty is readily understood. As a vessel enters any British port—London, Liverpool, or a minor one—he is put on board her, under the command of the tide-surveyor, to watch. The waiter has to see that no goods are improperly transferred or landed; that no artifice baffles the lynx-eyes of H.M. Customs officers. To all intents and purposes he is a Man in Possession, living on board both day and night, until the docks are entered, the cargo discharged, and the official permits granted.

On the Thames, quite a little army is thus employed. Continually coming and going between Gravesend and London Bridge, the full volume of life in the Pool is open to their gaze. "The din, the duskiness, the discord of order, activity, and industry," is monotonously familiar, and the chance of an occasional collision grows far more stirring to the old stager than that beauty, moment, and endless variety which sends the casual visitor into ecstacies of admiration.

At all seasons of the year, in all weathers, on all sorts of ships—home and foreign, old and new, large and small, well-found and poverty-stricken—tide-duty has to be done. The amount of work varies very greatly, both in bulk and in the individual instance. When commerce is flourishing, and the breeze holds firmly at certain points of the compass, extra hands have to be drafted off in considerable numbers; and, according to the size of the ship, the time she takes to make the docks, her accommodation, and the strength of the Customs detachment who walk her planks, is the task of the tide officer himself hard or easy.

To a certain extent, and varying with the special routine of special ports, probationers are employed. It is a stern and useful test at the outset of their Civil Service careers. It tries their courage, their endurance, their resource, their tact. It gives them a practical *grip* of their calling such as years of guide-book study and of oral instruction on shore would be powerless to impart. Very unpleasant it may seem to the tyro, a sad shock to those rose-tinted dreams which showed him only ease, certainty, and emolument in "Her Majesty's Service." But in later years, and when the experience has grown mellow by a constant recapitulation in younger ears, it is not regretted, but rather, indeed, gloried in.

The order of things is something like this:—An advertisement appears prominently in the daily papers of an open competition for a limited number of posts as out-door officer of Customs. A young man—most frequently of the lower half of the middle class—has his ambition at once fired. He writes off to the Secretary of the Civil Service Commission for particulars and forms; obtains them, and finds the list of examining subjects well within his powers. Those subjects comprise Handwriting, for which 200 marks are the maximum; Orthography, 200 marks; Arithmetic, as far as vulgar and decimal fractions, 300 marks; and English Composition, 200 marks again. A failure in *any* of these subjects will be absolutely fatal to his chances; but then he has not the slightest intention of failing. The fee for examination he thinks moderate enough, and so, at 15s., it really is. The lowest rate of commencing salary, if actually appointed, is £55 per annum, rising regularly by a fair increment, and with good chances of promotion, either by seniority, approved service, or a further competition. There is added a list of some fifteen towns whereat the struggle will take place simultaneously; and with places so widely apart as London and Dublin, Glasgow and Portsmouth, he has small difficulty in finding one to suit him. He works up, by aid of a coach or otherwise, and in due course, in the technical slang, "sits the exam."

Our friend waits a weary while on the tenter-hooks of suspense to know the result, and ultimately, when just on the verge of despair, receives a communication announcing his success. The subsequent investigation as to character, age (19 to 25), and health is likewise satisfactory, and, being high on the list of placed candidates, he has the choice of a location from amidst a dozen or more of ports. Which shall it be? For the sake of example, we will say that he elects to go to Liverpool. A date of trial is fixed, and comes. His first few days on probation pass swiftly and pleasantly with

"Men at peace on a peaceful shore,"

learning, listening, and with what he thinks the lightest

of duties. But by-and-by come rumours of "the tide." Those belonging to his department who have faced the ordeal are foremost in mild, unpalatable hints. They tell him of privation and discomfort with countenances on whose expression mischief wears the mask of condolence. Like the cabin-boy who is crossing the Line for the first time, the beginner hears many an antiquated joke with no suspicion either of its falsehood or of its staleness. His heart sinks within him; but, like a black thunder-cloud, the time of tide probation draws nearer and yet nearer. It is not long before he is actually enveloped therein—is out on the broad bosom of the Mersey, amid strangers and foreigners, tossed to and fro, from panting steam-tug to stately sailing ship, from unsavoury Eastern barque to speckless Cunarder. For the first time, it may be, "the romance of the sea" becomes to his ears something more than a phrase. In change after change, kaleidoscopic in suddenness and strangeness, its wonders, its contrasts, its mysteries are vividly impressed upon his memory. He may never live this life again, even for a day, but he will never forget it. Of course, the experience, whether it lasts for only a brief fortnight or three times as long, is soon over, and once passed is, so far as the probationer is concerned, over for ever; but all the same, and despite its novelty, it is a real trial. It means long hours, and very often some unpleasant adventures; natural anxiety, and in some weathers inconvenient exposure may be added.

At the smaller out-ports, although less continuous, tide-duty is probably quite as disagreeable. Conveniences are less, and the Customs officer must depend even more exclusively on his own tact and foresight. Since smuggling along our coasts went out of fashion as a recognised profession, the attempts at systematic and extensive evasion have naturally fallen to a minimum. Yet many an odd episode even now takes place. The tide-waiter and his masters on shore get queer glimpses often into human weakness and human cunning. Many an amusing dodge is tried to get suspicious parcels landed on the quiet. Probably, if it was not for the barrier of official secrecy and reserve, a whole volume might be compiled of comical and striking anecdotes from the memories of widely-separated Customs officers.

But here, by our side, is a gentleman in uniform who has actually been on tide-duty. Let us hear his story, and first ask a question.

"Oh, yes, sir! A tide-waiter has a fine chance to pick up a language or two. I've known several do it; carrying a grammar with them, committing its rules to memory while on watch, and learning the pronunciation from the natives they ran across. A queer school, you think—ship-deck, on the river; but it makes things stick in the memory a lot better than a professor's lecture or a pedagogue's cane could do. I've been on more than one ship myself where nobody besides could speak a word of English distinctly, and for which, on entering the docks, an interpreter had to be found.

"You want the record of a fortnight's work? Well, I'll start from a Sunday I had spent on shore; that'll be a sort of guide to my recollections.

"There was first the *Bertha*, a German—very rough crew—mixed cargo—ten hours' duty on her alone. Then three English ships, the largest the *Queen Coquette*. I and a comrade spent two days and two nights on her—and here comes the pinch. Of course, the constant change is interesting and all very well, and the pay is calculated pretty fairly, but the tide-waiter gets his share of hardships withal.

"One or other of us had to be on deck all the while, just like a sentinel; and if you split the twenty-four hours levelly into halves, that'll give twelve a piece for us of actual *bonâ fide* watching. A long day's work, you will admit; and sometimes it's worse. A vessel may have only one tide-waiter on board, and then, if anything delays her beyond the time estimated, the strain comes pretty heavy.

"Our sleeping berths would have been comfortable this time in the extreme, but for rats. The *Queen Coquette* was quite an old ship, and once these pests get into a vessel's timbers, it is the hardest task in the world to dislodge them. My off-time came first, and I went below and dropped into a doze in a very few minutes. What was it disturbed me? A most uncanny noise surely! Scrape, scrape, scrape, like a whole dozen of fret-saws going at once. A faint light from a river signal flashed in through the cracks and revealed—Ugh! I sprang to my feet, and tried in various ways to rout the invading host, but with small success; and—will you believe it?—sooner than go to sleep again under these circumstances, I went up above and kept my mate company. It was summer, luckily, and no hardship as regarded weather. It strikes me, too, that many an artist would have been glad to have held such a watch; night amongst the shipping would be a grand subject for a painting.

"The next three vessels to which I was transferred, one after the other, were by a coincidence all foreigners—number one was a Portuguese barque, with the usual mixed crew, presenting no points of special interest. Number two was a French ship from Rangoon. Very little English was spoken on her boards; but in answer to the ordinary inquiries as to health, the incidents of the voyage, &c., I learned that the captain had died on this journey, and that the ship was consequently in the charge of the chief mate. He was a jovial, good-natured fellow, who believed in treating the tide-waiter as he ought to be treated—with civility and the best he had to offer. The crew were not so pleasant a sample; as I had often found to be the case with strangers, they ate their meals on deck, in the open air.

"A succeeding English vessel was followed by a Norwegian, memorable only for its excellent trim and for having a captain I had known of yore. There, sir! that's a fair specimen of the work our fellows have to perform. In bad weather, as you may guess, it comes hard."

Our narrator is right, and, as was said at the beginning, the life of the tide-waiter is at least worthy of a little attention. In discomfort, in privation, in veiled and unveiled dislike, he goes about his task, and is not the least useful of those in "Her Majesty's Service."

THE COMET OF 1881.

"And I looked, and, behold, a whirlwind came out of the north, a great cloud, and a fire infolding itself, and a brightness was about it, and out of the midst thereof as the colour of amber, out of the midst of the fire."—EZEKIEL i. 4.

NIGHT after night the self-same firmament is bent above us, the familiar constellations wheel their courses, and the moon glides through her wonted cycle, until we become so accustomed to the reigning order that we neglect even to gaze upon the celestial scene. The earth becomes our all in all, and we are blinded to the mystery and grandeur of the universe around. At length, however, the sudden apparition of some strange orb in the sky awakes us from our apathy. We look, and, behold! some comet with its luminous train, like a "great cloud, and a fire infolding itself," shines out of the north and seems to open up the heavens to our eyes, as did the vision of Ezekiel the prophet, by the river of Chebar in Babylon.



FIG. 1.

These, doubtless, were the thoughts of many who witnessed the comet of 1881, which so recently paid us a flying visit. Just as the first appearance of a white explorer to the blacks of Central Africa enlarges their notions of the world, so does the advent of a comet in our night-sky make us reflect on the stupendous system of which we form a very insignificant part. The comet, like the explorer, too, is sometimes hailed as a supernatural being—a portent for good or evil; and, at all events, both of them are subjected to a curious examination. If the man is carefully investigated from head to foot by the intelligent native, the meteor is none the less inquisitively overhauled by the astronomer. "What is this thing, and where has it come from?" is the question which the man of science and the man of wool are equally eager to get answered.

The telescope, and latterly the spectroscope, have taught us a great deal about these vagrants of the solar system; but we have still much to learn. The telescope reveals their changing form to us, and the spectroscope gives us broad hints as to their chemical ingredients; but the information is by no means full, and their origin and structure still remain a mystery. In fact, although we believe that they are governed by the general laws of nature, their varying shapes are so capricious, and their appearance so rare and unexpected, that there is yet something very mysterious about them. We cannot tell for certain what they are, where they come from, or the purpose for which they are designed.



FIG. 2.



FIG. 3.

But for this very reason, perhaps, the story of a comet is even more interesting than that of any staid and sober orb. A planet revolves year after year in

its fixed orbit, describing an elliptic course about the sun. Its velocity varies comparatively little, and the share of solar heat it gets from time to time is fairly constant. These are conditions which fit it for the support of living creatures. Again, the oval paths of the planets are nearly in one plane, that is to say, their general level with regard to the sun is confined to that narrow zone of the heavens termed the zodiac; and all of them sweep round their central luminary in a direction from east to west. There is thus a certain family order and uniformity in their behaviour.

But, on the other hand, the orbits of the comets are at all angles with respect to the sun, and they rush along them indifferently from west to east or east to west. Moreover, their orbits are seldom of the round oval shape common to the planets. When they do form a closed curve, they are very elongated ellipses, and the comet journeys from the immediate neighbourhood of the sun far out towards the confines of the solar system. Thus it experiences a transition from fervent heat to freezing cold, and a corresponding change of speed. More often, however, the orbit of a comet is a hyperbola, or open curve, whose ends stretch outward to infinity and never meet. In such a case the wandering body leaves our system never to return. A Bohemian of the universe, it holds its way towards the distant stars, and falls perchance under the attraction of some other sun, which it forsakes in turn.



FIG. 4.

It is not only in its motions that a comet differs from a planet, but also in its shape. A planet is usually a globe of solid matter, permanent in form; but a comet has no settled figure. Its typical shape, however, consists of a bright round nucleus, or kernel, surrounded by a glowing "hair" or coma, and attended by a long luminous train. But there are comets which have neither tail nor coma, and others, again, which have no nucleus. Astronomers have actually seen a comet shorn of its hair and tail in a few days. The tail is an appendage which appears to grow out of the head as the comet nears the sun, and to shrink again into the head as it retreats. Curiously enough, it is always extended in a direction away from the sun, whether the comet be approaching to or receding from that luminary, hence it sometimes streams behind, and sometimes in front of the head. The length of these splendid objects is frequently enormous. The tail of the great comet of 1680, for example, was estimated by Newton, at its perihelion passage, to be 41 million leagues, a much greater length than the whole distance between the earth and sun. The volume of some comets exceeds the volume of the sun, but their total mass is very small in comparison, and even the most brilliant comets would be outweighed by one of the asteroids, or pigmy planets. This arises from the fact that they are principally composed of rarified gases.

Enough has been said to show that these magnificent but wayward orbs confer an extraordinary richness on the solar system, and serve to link it, by their timely visitations, to the vast universe of which it is a member. The multitude of comets has been likened by the great Kepler to the fishes of the sea; and Arago calculated that there are over seventeen millions of them careering within the boundaries of our system. Of these some 800 are known to man, by witness and tradition; but the majority of them are quite telescopic. The most celebrated of them are—Halley's Comet, noted in 1682, which returns every seventy-six years, during which time it recedes three billions of miles from the sun. Encke's Comet has a period of three and a half years, and recedes 375 millions of miles from the sun, that is nearly to the orbit of Jupiter. Curiously enough, however, this distance is decreasing, owing perhaps to ethereal friction, and the prospect is that in course of time the comet will fall into the sun. Biela's Comet has a period of six and three-quarter years, and during its visit in 1832 created the keenest apprehension that it would come into collision with our planet. But it crossed our orbit just a month in advance of the earth, and so we were saved from any "brush" with a comet. What the consequences of such an encounter would be, it is rather difficult to say. The cometary mass is so slight, that no great shock would perhaps be felt; but if the incandescent nucleus struck the terrestrial surface, it might scorch a continent or boil a sea, and the glowing gases of the train might exercise a malignant influence upon our atmosphere. Biela's Comet, on reappearing in 1846, was found to have divided into two separate bodies, which travelled together, with ever-widening distance; but now the twin travellers have gone amissing altogether, and it is supposed they have been broken up by the meteor-streams which circle round the sun.

Besides these periodic comets there are several famous non-periodic comets, which have perhaps only been once seen by the human race; for example, the great comet of 1843, which was visible in full daylight; and Donati's Comet of 1858, which presented the appearance of a golden plume athwart the sky.

Comet B, 1881, as the recent comet has been called, is probably either a comet of long period or non-periodic. Admiral Mouchez argues that it is the 1807 comet returned a hundred years before its calculated time; but, although it is difficult to calculate the periods of comets which have long narrow orbits, the error here implied is somewhat dubious, and the concert of opinion is that Comet B is quite a stranger to our history.

It was first seen by Dr. Gould, of the Cordoba Observatory, Buenos Ayres, on May 29th last, and in England on June 22nd, shining in the northern sky a little below the star Capella, which it outvied in brilliance. The tail stretched some 8 degrees across the sphere in a fiery brush, and was computed to be 200,000,000 miles in length. On June 24th, the head seen through a telescope presented the appearance shown in Fig. 1, where a jet of fire is seen to shoot out from the round nucleus towards the sun and mingle with the coma, as if the sun repelled it. Next night the nucleus was rayed round with fiery jets, as shown in Fig. 2, and on the 29th of June the comet had acquired the beautiful shape seen in Fig. 3, and on a larger scale in Fig. 4. The bright jet now appeared like an open fan, and through the nebulous coma a small star, A, shone with almost undiminished lustre, as the stars shine through the violet haze of a tropic evening, or the evanescent flush of the aurora borealis. After this date the comet rapidly grew dimmer, and finally disappeared.

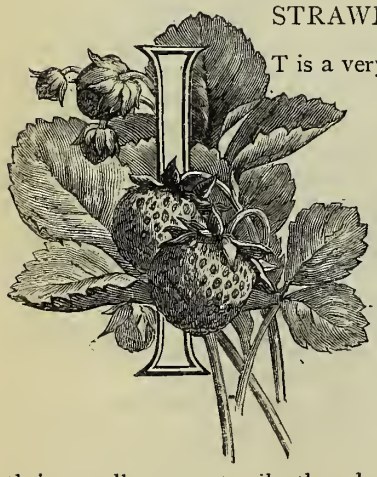
The spectroscope gave the usual spectrum of a comet's head, that is to say, a continuous spectrum crossed by bright bands, and indicating that the nucleus is probably an incandescent liquid, surrounded by a glowing gas. The tail shone partly by its own, and partly by the borrowed light of the sun. Its spectrum declared it to consist of some hydro-carbon gas in a luminous condition, and one observer found so close a resemblance between its spectrum and that of a blue spirit-flame, that he did not hesitate to consider them identical. Alcohol has been found very widely diffused of late upon the earth, but its presence in a comet is somewhat unexpected!

What the repulsive force is which drives the tail away is yet a mystery. Indeed, having regard to the extraordinary manner in which these appendages grow and shrink, or sweep the sky, it is difficult to believe they are material at all. Dr. Tyndall has supposed that they are merely an appearance caused in the shadow of the comet's head by the chemical rays of the sun. Dr. Tait, again, has likened them to a covey of sea-birds swaying into view as they change their flight. Our own opinion is that the luminosity of the tail is really an electrical effect like the aurora or the glowing gases of the electric arc, and when we consider that both sun and earth are highly charged with electricity, and that the outbreak of a flame upon the sun is sometimes attended by a thrill of all the magnetic needles on the earth, and by an auroral light in the upper atmosphere, we need not wonder if the electric repulsion of the sun acting on the electricity of the comet should render its gaseous tail self-luminous.

What purpose a comet serves is equally unknown. It may be appointed the carrier of fuel to the suns, and the streams of meteoric stones which follow in its wake would seem to bear the theory out; it may be a world in growth which has not found its settled course; it may even, as a famous physicist once suggested, bear the seeds of life from world to world; we cannot tell; but that it serves some wise and most important end we dare not doubt.

J. MUNRO, C.E., F.A.S.

STRAWBERRIES, AND HOW TO GROW THEM.



IT is a very poor house at the present day that has not at least "a bit of garden," and of all the many flowers and fruits that are likely to be suggested to the amateur, there is not one that will pay him better for a little care and attention than the strawberry. Hardy and prolific, it thrives well on most soils, though perhaps a rich stiff loam in which is plenty of clay suits it best. The method of cultivation, too, is exceedingly simple.

In the month of June, July, or August—the earlier the better, but plants may be put out as late as November, and then give a crop the next year—a quantity of well-struck plants should be secured.

The ground on which they are to be planted must be well and deeply dug, and all roots as well as stones carefully removed. After the ground has lain still for a few days, a couple of trenches about fifteen inches apart, parallel to one another, and six or eight inches deep, should be made. At the bottom of these trenches some good old stable manure, well rotted, must be placed; about half the soil previously taken out of the trench should then be raked on the top of the manure. The young plants may be put in six inches or so apart, care being taken to press down the soil firmly about the roots, and to avoid covering up the crowns of the plants. Copious drenchings with rain-water will be necessary in order to give the young

plants a good start ; and by degrees the remainder of the soil, as that in the trench settles down, can be placed round the plants. If the plants are put out as early as June, it is extremely likely that they may send out a few runners during the latter part of the summer, and these must be carefully removed.

The plants now will require to be kept free from weeds, and to be watered frequently. It must be borne in mind that the quantity as well as the quality of the first year's crop depends almost entirely on the care that is bestowed on the plants during the first autumn they are out. A slight hoeing will do good now and then to let warmth and moisture down to the roots ; but the hoe must not be allowed to penetrate deeply into the soil, or the numerous root-fibres would be injured.

Directly the cold weather makes its appearance, a good covering of long "muck" should be placed round the plants and between the rows. Nothing more need be done to them until the following spring.

In March, during a dry time, the old litter, now thoroughly deprived of its goodness, may be removed, and the surface of the soil lightly stirred with a Dutch-hoe. If any weeds make their appearance, they should be drawn out by hand if possible ; or at least cut down with the hoe. Then a fresh lot of manure must be placed round the plants.

The goodness from this will be washed down to the roots by the rains of spring and early summer, and the cleansed straw of the manure will form an admirable bed on which the trusses of fruit may rest. If good stable manure cannot be procured, the plants will have to do without it; but then liquid manure of some kind will have to be used, and clean straw, cut grass, or something similar will have to be placed under the fruit to keep it away from the grit. By the middle of May, blossoms will make their appearance, and just at this time the plants will require a considerable amount of watering, natural or artificial, or both.

Directly the runners appear, which as a rule they will do with the blossoms, they must be cut off, unless indeed fresh plants are required, and then the gardener must be prepared to sacrifice the size and quality of his fruit, for much of the strength of the parent plant will go to establish the young ones.

When the fruit is well set, watering will not be necessary, unless the rain holds off most persistently. Even then it is well to put off using the watering-pot as long as possible ; but if it is used, it must be used copiously to do any good. A mere wetting of the surface of the soil will not suffice, but the moisture must soak well down to the roots. If extra-sized berries are desired, the amateur can bring about this result by removing all the later and smaller fruit from each truss, leaving only one or two of the earliest and largest to ripen.

When the fruit is all gathered, the plants must not be neglected. The runners will still continue to grow, and they must be diligently cut off. The litter may be raked off as soon as the fruit is gone, and this will enable the hoe to be used with effect—but not deeply—between the plants during the autumn. The winter culture of the now established plants will be the same as that recommended for the young ones during their first autumn.

If the plants are properly tended, they will last for three seasons ; but after that time the fruit will begin to deteriorate both in size and flavour. The amateur will do well to make at least one new bed each year ; and in this way he can afford to do away with an old one without lessening in any appreciable degree his crop of fruit.

Strawberries grown in this way will far surpass both in size and flavour, as well as in appearance, those produced on the old slovenly plan, where the bed is allowed to become a tangled mass of plants of all ages, with a goodly sprinkling of grass and weeds which cannot be properly cleared off while the plants are so thick.

The amateur will be wise if he does not confine himself to one variety. Indeed, I would recommend a trial to be made of six or seven of the best kinds. A few only need be grown of each sort at first, and those that take most kindly to the soil can be retained. In this manner, too, a succession of fruit will be secured. The following varieties, which I have tried and found to be good ones, may be mentioned :—Sir Joseph Paxton, Vicomtesse Héricaut de Thury, President, Dr. Hogg, Keen's Seedling, Refresher, Forman's Excelsior. This last variety, indeed, is the best strawberry I ever met with. It is particularly hardy, of large size, a prolific bearer, and of the most exquisite flavour. In 1880 I had berries from this variety, grown in the way I have recommended, which weighed from $1\frac{3}{4}$ to 2 ounces each.

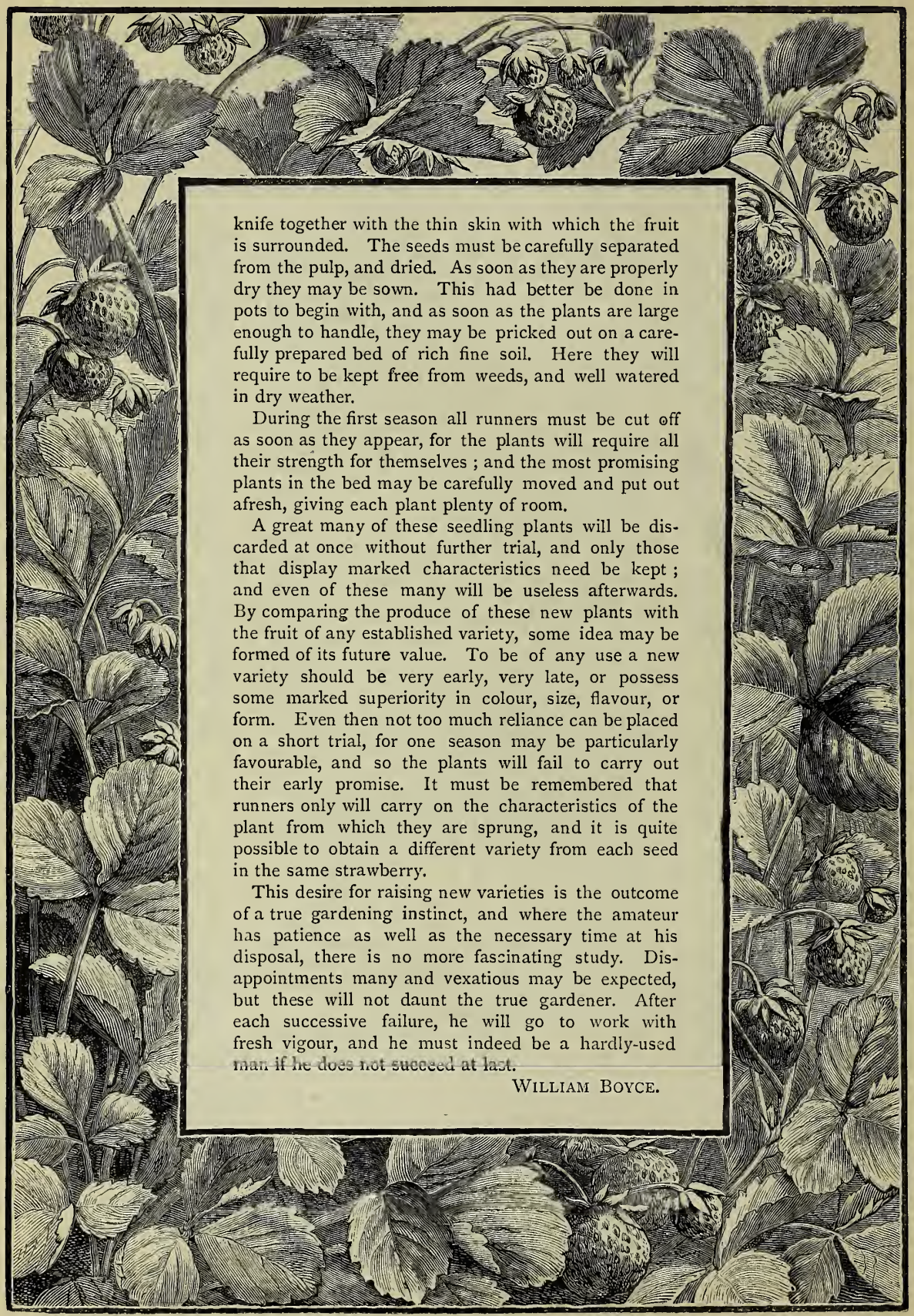
If the birds are too troublesome when the fruit is getting ripe, a net may be spread over the beds to exclude them. For my part I do not grudge the thrushes and black-birds their share of the fruit, for I well know they more than repay me for what they steal by the number of slugs they carry away from the bed.

Slugs among the strawberries are an unmitigated nuisance, and it is not easy to get rid of them, especially if the bed is netted so as to keep out the birds. The best remedy I know of is to look for the pests in the evening and destroy them. Soaking the litter with lime-water answers sometimes, but this is uncertain.

The hints given above are the results of my own experience, and if my suggestions are followed out, the amateur, even if he be only a beginner, may confidently expect to be rewarded by a fine crop of this most delicious fruit.

If the amateur be desirous of handing his name down to gardening posterity as the raiser of a new variety of strawberry—and the ambition is a natural one on the part of the enthusiastic horticulturist—the process is simple, but it involves the expenditure of considerable time and trouble.

The seeds, as is well known, grow on the outside of the berry, and the finest fruit available being selected, these seeds may be pared off with a sharp



knife together with the thin skin with which the fruit is surrounded. The seeds must be carefully separated from the pulp, and dried. As soon as they are properly dry they may be sown. This had better be done in pots to begin with, and as soon as the plants are large enough to handle, they may be pricked out on a carefully prepared bed of rich fine soil. Here they will require to be kept free from weeds, and well watered in dry weather.

During the first season all runners must be cut off as soon as they appear, for the plants will require all their strength for themselves ; and the most promising plants in the bed may be carefully moved and put out afresh, giving each plant plenty of room.

A great many of these seedling plants will be discarded at once without further trial, and only those that display marked characteristics need be kept ; and even of these many will be useless afterwards. By comparing the produce of these new plants with the fruit of any established variety, some idea may be formed of its future value. To be of any use a new variety should be very early, very late, or possess some marked superiority in colour, size, flavour, or form. Even then not too much reliance can be placed on a short trial, for one season may be particularly favourable, and so the plants will fail to carry out their early promise. It must be remembered that runners only will carry on the characteristics of the plant from which they are sprung, and it is quite possible to obtain a different variety from each seed in the same strawberry.

This desire for raising new varieties is the outcome of a true gardening instinct, and where the amateur has patience as well as the necessary time at his disposal, there is no more fascinating study. Disappointments many and vexatious may be expected, but these will not daunt the true gardener. After each successive failure, he will go to work with fresh vigour, and he must indeed be a hardly-used man if he does not succeed at last.

WILLIAM BOYCE.



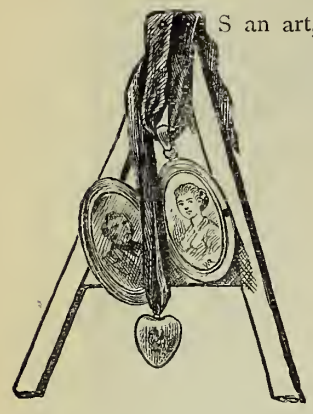
MUST you go, and leave us lone,
Companions of our summer hours?
Alas! when you afar have flown
A weary life will then be ours.
We oft have watched at sunny eve
The changes in your airy flight,
And longed like you the air to cleave
With hearts all buoyant with delight.

We saw you come in lovely spring,
When all the earth was bright and gay,
And hearty was our welcoming,
Yet you so soon will fly away!
To southern lands, where spring is still,
And balmy odours fill the air,
You haste o'er stream and dale and hill,
O would that we could follow there!

With you depart sweet summer days,
And winter shows its icy hand;
Bright flow'rets fade before our gaze,
And falling leaves bestrew the land.
Ah, you must go, alas! farewell!
'Twere death for you with us to stay,
But hopes within our hearts will dwell
That we shall meet again in May.

EDWARD OXENFORD.

MINIATURE PAINTING FOR AMATEURS.



AS an art, miniature painting is not thought of much importance in the artistic world, evidently; there are no exhibitions specially for miniatures, and those exhibited at the Royal Academy are, I think, very rarely noticed by the newspaper and magazine critics.

I do not wish here to take up time and space in seeking and describing the reasons for this neglect; my business in these pages is to give some information and encouragement to those amateurs who wish to study the art, and I will do so as clearly as possible.

One of the advantages of a miniature is the power you have of being able to carry it about with you; charming little cases are made for them, of various sizes and materials, with or without covers. An old lady of my acquaintance has a drawer full of miniatures of her relations and ancestors, and she says that it is one of her great amusements to have the drawer out and examine its contents one by one. Through being kept from the light, the colours are fresh and clear, very likely as much so as when they were painted.

The best material on which to paint miniatures is ivory. Painters have used both paper and parchment, but ivory, to my mind, is very superior, for several reasons; the chief being its delicate tone of colour. In all complexions there is yellow, and the colour of ivory being a deep cream-colour, it makes an excellent grounding. Pieces of ivory ready prepared for painting on are sold by artists' colourmen. In choosing your piece, be careful that it is all over of the same thickness, also that there are no stains or scratches; do not choose a large piece, the charm of a miniature being its small portable size; if it is beyond a certain size, you might just as well have an ordinary water-colour or oil painting.

There are several ways of getting the drawing on to the ivory. If you are very expert with your pencil, and quick at taking likenesses, you can at once draw from the life on the ivory; but it is a risky proceeding, as you should never have to "rub out" with bread-crumbs or india-rubber, the surface being apt, when treated thus, to become greasy, and it is then difficult, sometimes impossible, to paint on.

I think the best way is to make a careful drawing on a piece of white paper, exactly the same size that you wish it to be in the miniature; when the drawing is finished and corrected, go over it clearly with pen and ink, or a dark sharply-pointed pencil; then place the piece of ivory over the drawing, and hold them both firmly against the window; the drawing will show through the ivory; take a fine brush charged with flesh-colour and draw on the ivory. There will be no need then for correction on the ivory, the drawing on it being quite the same as that on the paper.

You can if you like trace on the ivory with a lead-pencil, but it must be a very light one, as the black-lead is apt to mix afterwards with the colours placed over it, and a dirty appearance is thus caused.

I may here remark that work on a miniature must be very clean, the colours very clear, and brushes without any dust in them or hairs liable to get loose. A miniature is not painted for general effect only, to be looked at from a distance; it is meant to be held in the hand and closely examined.

Ivory being semi-transparent, it must be placed on several pieces of white paper, or the board on which it is painted will make it dirty or dingy-looking. The best way of managing this very important part of the work is as follows:—Cut three sheets of note-paper in half, gum them together at the top, place the piece of ivory on the top piece; gum it just at the upper rim, taking care that none flows down, as that will cause a smudgy appearance under the ivory. The ivory may reach to about half an inch of the top of the paper; through this half-inch pierce a drawing-pin, and thus fasten the whole firmly to the board; place a weight above for a few minutes to thoroughly flatten it, and then it will be ready for you to begin to work on. It is as well to have a palette with divisions, and to prepare sufficient colour to last for your morning's or afternoon's work as the case may be. Have by your side a little pot of refined gum, half a dozen brushes, and two pots of water.

Some people's idea about miniature painting is that it is entirely composed of stippling; that is a mistake; the result of beginning to stipple too soon is that the painting looks thin and dotty. As much as possible put on the required colour with small washes; a flat brush is very useful for backgrounds and smooth hair or the folds of drapery. Begin first by washing in the general tones of the skin; for a very fair complexion, pink madder and yellow ochre form a good mixture; for a dark complexion, light red, yellow ochre, and a touch of burnt sienna. Green sparingly used is useful for shadows, but the best ordinary shadow colour is cobalt, light red, and yellow ochre; you can always add to it what colour you find predominating in the parts you wish to paint. Sepia is a good colour to put into very dark shadows, but dark shadows should as far as possible be avoided in miniatures; the sitter should be in as full a light as is becoming.

Very fair hair is composed of yellow ochre, shadows sometimes browny and sometimes inclining to green. Half shut your eyes and, looking thus at your sitter, get the general tone of colour. It is impossible to put in every detail of it on so small a space as a piece of

miniature ivory. If approaching gold, a very slight thin touch of cadmium may be used. I am rather afraid of recommending this colour as it is so very intense, but it is a beautiful tint for golden hair when carefully used. Brown hair may be very well described with vandyke brown and sepia, shadows very often of a purple-brown ; red hair, of burnt sienna with a touch of lake or ochre according to its hue, shadows very often purple.

These are for the first washes of the hair ; for finishing, no doubt, other tints may be introduced ; every person's hair has its individual character.

Some miniature painters often introduce objects into the background ; I do not like the plan, as a rule, myself ; I like all the interest and work to be centred in the face, and the background to be merely that tone of colour and of that degree of finish which will best throw up the face. For a fair person a greyish-blue background suits very well, for a dark person a greenish-grey one.

I will not hamper my readers with minute directions. They must make experiments for themselves, following as much as possible the broad rules I lay down.

It is difficult to paint the face of an old person. It is not possible to put in all the wrinkles which, of course, help to a great extent to show age. The small size of the miniature would prohibit such detail ; you must choose a few of them and be careful not to put them in too strongly. Shadows in an old person's face often incline to purple. Grey hair is very well composed of Payne's grey ; and white hair is often streaked with a soft yellowish hue. Hands and arms ought to be paler than the complexion of the face and more inclining to yellow, the nails of a pinky tint.

With a few more remarks I will end my paper, hoping that in a small way I may have helped to hinder the gradual decadence of miniature painting. Always leave the lights in the eyes, and then put a slight touch of Chinese white on the blank spaces left. In choosing the frame for your miniature be careful that the glass is clear and white, without flaw. Do not remove the white paper from the back of the ivory, but cut it with the ivory to the shape and size required, or the back of the frame will show duskily through. A little gum mixed with the dark colours and put in the shadows is a great improvement.

ARTISTIC FURNISHING FOR MODERN HOUSES.

MORE ABOUT THE DRAWING-ROOM.



THERE are still a few points about the drawing-room remaining to be considered, and one of the most important of them is that of lighting by artificial means. Some forty years ago, Edgar Allan Poe wrote a paper on the philosophy of furniture, in which he describes a room furnished in such a manner as to satisfy his ideal of perfection. Making allowance for the absence of mere technical knowledge, and also for a little exaggeration in the direction of richness and magnificence, natural to his almost Oriental imagination, it is wonderful how he has by the sheer force of his artistic instinct, without (be it remembered) any sort of training in æstheticism, put his finger so unerringly on the principal blots in the style of decoration and furnishing then in vogue in New York, and without much difference on this side of the Atlantic. Thus, speaking of curtains, he says, "An extensive volume of drapery is under any circumstances irreconcilable with good taste;" of carpets, "The abomination of flowers or representations of well-known objects of any kind should not be endured within the limits of Christendom ; of hanging pictures, "The tone of each picture is warm but dark. There are no 'brilliant effects.' *Repose* speaks in all. Not one is of small size. Diminutive paintings give that *spotty* look to a room which is the blemish of so many a fine work of art overtouched." But it is upon the question of lighting the drawing-room that I especially wish to draw the reader's attention to a few sentences of his, which seem to me as applicable now, and to us on this side the Atlantic, as when he addressed them, so long ago, to American readers.

"Glare is a leading error in the philosophy of American household decoration, an error easily recognised as deduced from the perversion of taste just specified. We are violently enamoured of gas and of glass. The former is totally inadmissible within-doors. Its harsh and unsteady light offends ; no one having both brains and eyes will use it. A mild or what artists term a cool light, with its consequent warm shadows, will do wonders for even an ill-furnished apartment. Never was a more lovely thought than that of the astral lamp. We mean, of course, the astral lamp proper, the lamp of Argand, with its original plain ground-glass shade, and its tempered and uniform moonlight rays. The cut-glass shade is a weak invention of the enemy. The eagerness with which we have adopted it, partly on account of its *flashiness*, but principally on account of its *greater cost*, is a good commentary on the proposition with which we began. It is not too much to say that the deliberate employer of a cut-glass shade is either radically deficient in taste, or blindly subservient to the caprices of fashion. The light proceeding from one of these gaudy abominations is unequal, broken, and painful. It alone is sufficient to mar a world of good effect in the furniture subject to its influence. Female loveliness, in especial, is more than one half disenchanted beneath its evil eye.

"In the matter of glass generally, we proceed upon false principles. Its leading feature is *glitter*—and in that one word how much of all that is detestable do we express! Flickering, unquiet lights are *sometimes* pleasing—to children and idiots always so—but in the embellishment of a room they should be scrupulously avoided. In truth, even strong *steady* lights are inadmissible. The huge and unmeaning glass chandeliers, prism-cut, gas-lighted, and without shade, which dangle in our most fashionable drawing-rooms, may be cited as the quintessence of all that is false in taste or preposterous in folly."

There can, I think, be little doubt that in homes of modest pretensions a good moderator lamp is the

most satisfactory and convenient illuminator which we possess at present. The soft light of candles, in brass chandeliers, or scattered about in sconces fixed against the walls, or in separate candlesticks, affords perhaps the pleasantest and most diffused light of any; but candles, if constantly used, are more expensive than largest-sized candles are used, they look unwieldy and out of proportion to the sconces or sticks in which they are set. As adjuncts to the lamp they are, however, indispensable.

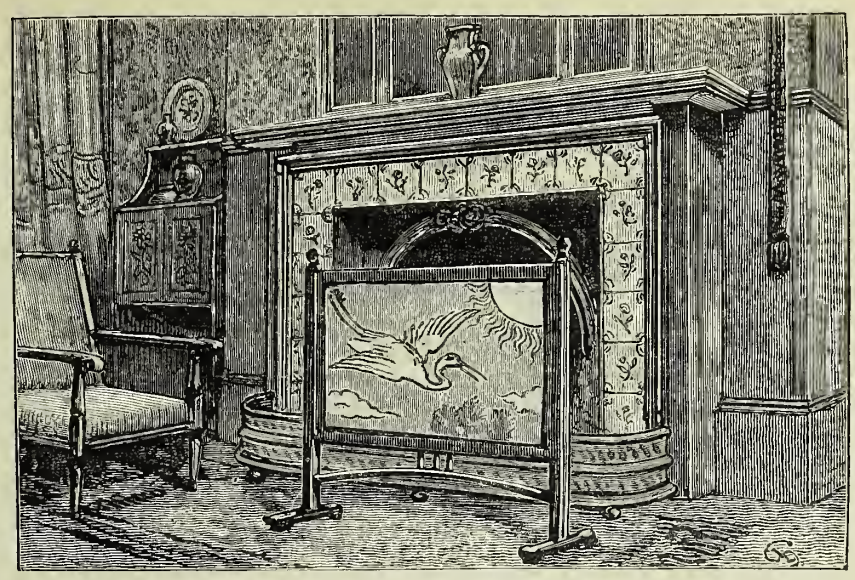
There are a few good patterns of oil lamps now to be had at the better shops, but, as a rule, the more



FRAMEWORK PARTITION.

oil, and entail besides extra trouble in cleaning. Candles in a drawing-room, too, present a practical inconvenience in the difficulty of getting, even in these days of improvement, a good slow-burning material. The candles commonly to be had are pretty to look at, and well finished and waxy in surface; but they burn away so fast, especially in hot rooms, that unless they are used of very large size they do not last the evening out; and it is especially disagreeable to see them burning low, and to have to replace them during the course of the evening. If, on the other hand, the expensive lamps are too ornate and pretentious, while the lower-priced ones are very "Brummagem" indeed. Some of the old Delft or Nankin vases make good stands, and if the plainest possible type of burner be chosen, and fitted thereto with a clear glass reservoir, the result is a much better-looking and not more costly lamp than the gimcrack things usually seen.

Between gas, oil, and candles, our choice lies at present, but what the future may have in store for us in the way of electric lighting it is impossible to foresee. Electricity as a light-giver has two very important



FIREPLACE, WITH DUTCH TILES.

merits. It affords light without sensible heat, and is practically free from injurious emanations in the way of smoke or other products of combustion. On the other hand, the colour of the light is ghastly in its whiteness, singularly harsh and cutting in its want of diffusion and consequent black shadow, and, at all events up to the present time, uncertain in steadiness. At the best it must be very much improved in these essentials before it can be at all endurable as a domestic illuminant.

Of all the features in the drawing-room, the one pre-eminently intractable to management or modification in the artistic direction is the fireplace. It is undoubtedly the *bête noire* of the decorator of moderate means. In cases where a little expansion in the way of cost is possible—and surely the drawing-room of all others is the one most deserving of the exception—the treatment is simple enough : marble chimney-piece and cast-iron firegrate removed bodily ; a tiled hearth, common red tiles will do very well, and a lining to back and sides of opening with the same or common Dutch tiles, with a simple basket-grate, a margin of stone or dove marble, and a wooden chimneypiece painted to match the other woodwork in the room. But in nine cases out of ten these are unattainable luxuries. The white marble chimneypiece and the bright steel or black drawing-room stove—very ornamental, very curly, and very ugly—must both remain, for they are the landlord's property, and our tenure of the house is not secure enough to make it prudent to expend the pounds necessary to remove them and put something better. The grate, then, must perforce be left as it is. The marble chimneypiece may, however, be cased over wholly or partly with wood, which casing may be taken away at the expiration of the lease. There are now plenty of good designs for such casings to select from, ranging from four or five pounds upwards. I have given a sketch of one of the simplest forms, which might be made by any carpenter. It is shown set round with tiles—Dutch, blue and white, or plain glazed tiles of buff or greenish tint. The inside faces of the casing, extending between the grate and the tiles, should be made of thin sheet-iron or stout zinc. Failing this, there is still the resource of mantel-board and valance, either with or without curtains of serge, plain or embroidered, drawn back in winter, and across in summer ; by which the white marble is veiled and the fireplace brought more nearly into accord with the other features of the room.

Most of our London drawing-rooms consist really of two rooms, back and front, thrown into one by means of widely extending folding-doors, or, more commonly now, by an arched or flat-topped opening only. As a pleasant variation from these arrangements, it is sometimes convenient to adopt a sort of compromise between a solid wall dividing the two rooms, and a wide opening. A suggested arrangement of this sort is figured in our opposite illustration. It consists of a framework fitting into the existing wide opening, reducing its width to, say, three feet six inches or four feet, and filling up the remaining space with a partition, which may be panelled or papered to match the wall-paper of the room, four feet or so high, with a couple of arched openings over it. Curtains may be hung on one side of this arrangement, and the whole framework may easily be constructed so as to be quickly removable in case the two rooms were wanted for a special occasion. For most of the time this alteration will be found convenient, as affording increased wall-space, and decidedly more picturesque inasmuch as it takes off from that undeviating squareness and obviousness of plan which are so uncompromising in their monotony in London rooms.

It is not necessary to insist upon the fact that not even the best decoration and furniture will insure a

satisfactory effect in a room if the furniture be ill-arranged; in truth, our drawing-rooms are, as a rule, if anything too much arranged. Either the chairs, ottomans, and tables are set with such scrupulous nicety, not one an inch awry, that one is afraid to move a chair into a more convenient position, from the feeling that such a departure would ruin the mechanical symmetry of the arrangement; or, with a view to an informal effect, the floor is covered with furniture standing at all angles, with such carefully studied informality that the key to the disposition is not to be fathomed, and not picturesqueness, but bewilderment and confusion is the result. The best arrangement possible is, indeed, not often obvious without much careful consideration and repeated experiment. No uniform rule can be formulated in this case, for rooms of various shapes, and especially of various dimensions, require different treatment. For instance, in very small rooms a much greater formality is not only permissible, but essential, than would be suitable for rooms of greater size. In the latter, provision should always be made for separating the occupants into groups, each with its convenient table and chairs, and means of amusement or suggestions for conversation, such as books, prints, flowers, and so forth. Yet this isolation should be so managed as not to interfere with the general sociableness of the whole gathering. It should be possible to converse with one's neighbour without attracting the enforced attention of all present, and not impossible to form one of a collective audience to an individual speaker or performer at the piano. The thoroughfares also require some care in arrangement. There should be room to move about from group to group without disturbing others, and the passages should be as straight as possible, for nothing can be more awkward than to have to make one's way, say to the hostess, by a devious course of perpetual twists and twirls round tables and chairs.

I hope I have not convinced any of my readers that it is impossible to arrange a drawing-room properly. A little tact and independent thought will do wonders. I say *independent* thought, for it will nearly always be better rather to study the peculiar capabilities of our own room than to try to imitate that of some one else. However satisfactory the effect of the other may be, it is ten to one that the conditions are not the same. The mere fact of a difference in scale in the furniture, or in quantity, shape of room, relative position of doors, windows, and fireplace, are all elements that will to some extent affect, if not dictate, the disposition of the contents of the rooms.

CHARLES W. DEMPSEY.

"WHERE THERE'S A WILL THERE'S A WAY."

WHERE there's a will there's a way,
To seek it never give over;
If you fail to find it to-day,
To-morrow you may discover.

For the man of determined will
There is nothing too hard to do;
With patience, and labour, and skill,
Earth, ocean, and air he'll subdue.

Through the rock the miner will bore
To find out the diamond or spring,
From the depths of the sea to the shore
The pearl the diver will bring.

The seaman with compass to guide
At lands he ne'er saw will arrive,
And right 'gainst the wind and the tide
His steam-impelled ship he will drive.

With the eagle the aëronaut vies
In the sky his dominion to share;
On gas-borne pinions he flies
O'er ocean and earth through the air.

Though an Alp block the way 'gainst his will,
That will it opposes in vain:
The engineer pierces the hill,
And drives through the tunnel his train.

Through the earth, and the sea, and the air
He sends the electrical stream,
His words through all regions to bear,
To illumine the night with its beam.

There is nothing that man cannot do
If with courage he works night and day;
The knot you can't open, cut through,
For where there's a will there's a way.

JOHN FRANCIS WALLER.

WHAT TO WEAR.

CHIT-CHAT ON DRESS. BY OUR PARIS CORRESPONDENT.



DURING the month that is opening upon us, demi-saison costumes must be thought of; and altering half-worn dresses and re-trimming others, so as to give them a totally different aspect, will occupy the minds of the economical. Never, indeed, did Fashion aid such intentions more satisfactorily. The fact alone of a Newmarket bodice—totally dissimilar in colour and material from the skirt—being in vogue is a great point, and then the shaded trimmings and ribbons, the resuscitation of moire, and the strong contrasts of colour that are worn, all help to the re-arrangement or "doing up" (as the technical phrase runs) of a dress until it is unrecognisable. The illustrations here given will aid amateur dressmakers as they present an unusual variety both in style and make.

The small damsel at the commencement of this chapter, promenading her doll, wears a thin serge frock trimmed with embroidered frills to match. Here are the inevitable gathers at the neck, waist, and cuffs, for rows of gaugings and puffed sleeves are prominent features in the simplest, tiniest frocks, equally with the most costly dresses for older wearers. The three figures in outline illustrate respectively a garden party toilette for a young lady, a quiet afternoon walking dress for a matron, and a dress for such occasions as formal calls, at-homes, &c. The first is flowered sateen and plain sateen combined, the latter being used for the skirt, which is trimmed with several rows of kilting, while the over-dress is edged with embroidery worked with colour; the elbow-sleeves are prettily puffed. Satin and grenadine could also be used for this costume. The second outlined figurine wears a myrtle-green cashmere and satin dress, the more costly material being employed for the plaitings and ornaments generally. Cotton-backed satin, be it whispered, is greatly patronised, especially when there is a combination of two materials in one dress. The third lady wears a shot silk costume in which the tops of the sleeves are higher than the tips of the shoulders, and are very full. This cut is supposed to give a tailor-made effect, and to render the waist more shapely, and is now considered almost *de rigueur*.

The groups next claim our attention, and the five figures wearing out-door costumes all present totally different styles of make. No. 1, in a dark serge skirt, with draped tunic and deep kilting, wears a close-fitting coat of summer cloth, with bright metal buttons—an unobtrusive, convenient walking dress. No. 2 has a black satin mantelet, gathered Mother Hubbard fashion round the neck, and again at the waist, the ends falling long and straight, the lace and ruche being heavily beaded with jet. On No. 3 we have a dust-cloak made of Tussore silk ornamented with bright crimson ribbons; but black and white soft silk in tiny checks is often used for the same purpose, the trimming then being black lace. Holland has been much patronised for dust-cloaks during the hot weather, for holland washes, and although it rumples easily, can be made ever fresh. The cloak in question has a gathered plastron inserted in the centre of the back. No. 4 is a useful costume made in bège, and trimmed with a darker shade of the popular golden-brown satin. This satin is used for the revers, collar, belt, and trimmings on cuffs and pocket. The dark brown parasol has a printed foulard lining, for linings no longer present plain monotonous surfaces. The last toilette is somewhat æsthetic in style, with its puffed sleeves and clinging draperies. The flounces on the skirt are richly embroidered.

The in-door dresses in the second group are all made of soft clinging materials, such as nun's veiling, Sicilienne, &c., in pale, delicate colourings, enlivened with ombré and striped satin ribbons. Pink, although it has been the rage during the season, and hence somewhat common, is still the favourite colour; it is generally becoming to young fresh faces, and can be most effectively toned down with black lace.

A new form of making, which seems very admirable for renovating a half-worn dress, or turning two of this kind into one, is a bodice of the darker shade, or more brocaded stuff, and a very narrow train-piece, just laid carelessly on the back of a skirt of quite distinct pattern and material. For example, a skirt of leather-coloured Sicilienne, and a bodice of grenat or dark satin brocade with leather-colour design upon it, or a plain satin skirt with velvet bodice and train. This style is equally suitable to a long or short gown, as the train-piece is often only a breadth wide and plainly hemmed round.

Some of the best-dressed American women—and they are a good criterion of what is really the fashion—are wearing short-all-round skirts, the backs full and gathered at the waist, with only drapery in front. Another style they affect much are long pelisses with no fulness, matching the skirt but lined with a bright colour; as, for example, fawn-colour with cardinal, black with old-gold.

They adopt the Norfolk jacket very generally, either matching the skirt or not, and the newest belts are



made of woollen girthing embroidered in crewels and fastened with three straps in front.

The summer is waning but not quite over, so I will tell you of some charming new fabrics. For example, mousseline de soie—not the old original kind; it is a mixture of wool and silk, and very light. As well as dresses, it is being adopted for curtains in the place of ordinary muslin, and with some slight outline of embroidery upon it is very charming indeed. These designs are generally copied from Japan. The nearer we approach to Japanese taste the nearer we arrive at popular taste. For autumn wear, especially for garden parties, the Japanese printed crapes are admirable. They are generally made up with plain crape cloth and much trimmed with lace.

There never was a time when country party gowns were so pretty. Nun's cloth is now woven with almost invisible threads of silk, and makes up in most graceful folds. Batiste and cottons are covered with Pompadour bouquets, or striped, or shaded, and are of vivid colouring. Indeed, some of the newest French dresses worn at fashionable watering-places are so glaring that they recall the early cretonnes, and are so gathered and puffed that it is not only surprising how their wearers ever get into them, but how they are ever made to display so much needlework. Unless these much-gathered bodices and skirts are properly cut, they are utter failures.

Frenchwomen are never *outré* in their attire, but the fashions they originate, yet do not follow, are sometimes exceedingly ridiculous. Englishwomen will not easily extinguish their prejudice in favour of white underclothing, though a few have given in to soft coloured silk, and fewer still to black Surah or satin. But we hope that at all events, as far as Englishwomen are concerned, no sale will be found for pink linen chemises, trimmed with black lace, which one well-known Paris house is introducing, or boots with gilt spurs, or buttoned boots with the button-holed piece edged with lace; they are eccentric and have no excuse of appropriateness.

Collars, neckties, and the etceteras of the kind have so much to do with finish in dress, that I must give you the last dodges—I can think of no better word. Paris

has busied itself with tall collars, and three-storied "beguins," made of point d'Angleterre and lined with coloured satin. Americans wear scarves nearly half a yard wide, made of lace and muslin, and tied in very large bows. Englishwomen affect several varieties of the Steinkirk, indeed almost any style, for full morning dress, in which a great deal of white lace or muslin can be made to cover the front of the gown. A very curious style is a box-plaited frill turning down from the throat to the depth of eight inches, made of soft muslin bordered like a pocket-handkerchief, and without doubt veritably one or two pocket-handkerchiefs, the two corners crossing the bodice of the dress in front. Very large handkerchiefs of muslin embroidered and edged with lace are also deftly arranged about the bodices; but, truth to tell, these depend entirely on the skill in putting on. A long lace lappet wound round the throat, the ends twisted on the left side and fastened with a diamond and pearl arrow, is a very good style, but requires the same care. And old-fashioned collars reaching to the shoulders are coming in, especially heavy embroidery and Irish point.

The great Paris man-milliner has the happy talent of combining fashionable with artistic dressing, and some very pretty dresses from his atelier have had touches of jonquil-yellow, sombre greens, copper-red, and china-blues; but his studies from old masters have the merit of being becoming, and he softens down rough edges with Spanish lace, and he invariably chooses rich materials, especially brocaded velvets, of many hues all well blended.

French hats are exceedingly large, and are generally worn at the back of the head, so that the brim, lined with dark velvet, forms an aureole round the head. They have somewhat pointed crowns, and their only trimming is a couple of long ostrich feathers placed round the crown; the tips falling on the left side.

In London the Hogarth hat has now quite succeeded the Gainsborough. It derives its name from a picture called "The Forfeit," where a pretty girl who has donned his hat is being kissed by a young officer. Plush and beaver are the materials in which "The Forfeit" is mostly made, but its characteristic is that it is three-cornered. I have seen some pretty French hats lately of a totally different stamp, viz., piquant white straws, having large bunches of flowers and much lace; peonies and crushed roses carry off the palm, and in the country the lace is seen at the edge of the brim, forming a sort of veil. Then very decided-coloured straws are worn—bright claret-colour with a highly glazed surface. Beehive hats are a monstrosity, and though sold will not, let us hope, become the fashion.

The square-crowned bonnets covered with steel or gold embroidery are suitable to be worn on most occasions with any dress, and so are to be recommended.





Many mothers will be desiring some picturesque frocks for their little girls. For out-doors and indoors, I recommend the Mother Hubbard frock, made with a yoke at the shoulders, and full from that, with six rows of gatherings, full sleeves to the wrist, having a puff at the shoulders, buttons all down, and a lace collar almost hiding the yoke. Sometimes the style of the frock, but not the cut, is altered by a side sash round the waist, and a short sleeve of one puff. Occasionally, on very narrow sleeves, the wrist appears below the puff, and a couple of gathered flounces are added to the skirt. A Princess frock may be made very artistic-looking by means of a square of gatherings of distinct colouring let in the front at the throat, and a puff at the shoulder and elbow to the tight sleeves, with a thick ruff of lace at the throat.

Bright blue and scarlet shaded ribbons appear on the pretty muslin smocks worn by children for full dress. They are gathered at the neck, and again above a flounce at the edge of the skirt, so that the space between hangs in graceful folds. Happily Fashion decrees that children's garments should be loose-fitting and light, giving the young growing limbs ample play. Buttonless gloves for little girls are universally worn, and are long enough to protect the wrists.

The scarf-mantles have held good throughout the summer, either straight or rounded at the back; and now a soft warm Indian woollen stuff, fringed all round and made in the same form, is being prepared for the autumn. Spanish lace mantles, and others trimmed with this lace, are most popular, and often heavily trimmed with either jet or steel. Shawls are sure to come in again—I mean the Indian and Paisley. Our sisters across the Atlantic carry them on their arms, and don them when they want a little additional warmth, just as our mothers wore them, folded crosswise, the point at the back. Shawl-wearing is an art.



Parasols become larger each month, and are very often made of shaded silk, with full frillings of lace round, or sometimes plaitings of silk, which, when the parasol is not open, stand out very stiffly.

A cotton, or rather thread glove, has just been brought out, which has an elastic at the wrist, and the additional length equivalent to buttons is all open-work. These are very comfortable every-day wear in hot weather.

Kid gloves are even made with silver or gold embroidered monograms, outlined with pearls, both for morning and evening wear, so that ornamentation is not going out in this department.

Crinolettes are coming in, but as yet only at the back, and these are occasionally superseded by a trimming of large bows lined with a contrasting colour, placed outside the back breadth, which gives a most bouffant appearance. Well managed, it is an improvement to the figure, this additional fulness at the back; a dress that has been worn a little retains its freshness far longer if it is thus arranged.



The steel crinolettes to tack into any gown can be bought ready made. White frilling at the edge of short gowns is a thing of the past, but for evening gowns wide lace balayeuses are still worn.

Rarely have travelling dresses been in better taste than this season, chiefly because they are simple. Frenchwomen say that such costumes should combine elegance, durability, and ease, and in this they are right. The greatest care should be taken in selecting the material, which should be strong and should not rely on trimmings for satisfactory results. Cheviots are the popular favourites in checks, plaids, and stripes, the colours being so skilfully combined that no one tone stands out conspicuously. Dull reds and browns with lines of yellow, for example, are so interwoven that, at a short distance they have the effect of a single tone. No other fabric is used with Cheviot; it is made up with habit bodice, all cumbersome draperies being avoided in the skirt.

Fine flannel and camel's-hair are considered more elegant than Cheviots, and are in great favour with Frenchwomen for their travelling costumes, made up in combination with silk of the same colour. They select subdued shades in olive, brown, drab, blue, and invisible green.

THE GATHERER.

Sanitary Paint.

The lead base of ordinary house-paints is known to be unhealthy, and it is satisfactory to find that a London firm have introduced a new class of pigments, prepared from sulphate of zinc and sulphide of barium. Both of these bases are harmless, and at the same time produce a more imperishable paint than lead. The sulphate of zinc is prepared by dissolving scrap zinc in dilute sulphuric acid, and the sulphide of barium is made by a secret process of the inventors. The two solutions are mixed in tanks, and a white precipitate is thus formed. This is calcined at a temperature of 1,000° Fahr., and then thrown hot into cold water. By this means a very fine powder is obtained, and sold under the name of "Griffith's white."

Silicate paint of a very superior kind is also manufactured; its quality being due to the purity of the silica employed in its preparation. This pigment is particularly adapted for painting ironwork, as it exerts no chemical action upon it, and has excellent weather-proof properties.

An Iron Lightning Conductor.

At a recent lecture delivered at the Royal United Service Institution, Captain James Bucknill, R.E., who has been employed for some time past in testing and inspecting the Government lightning conductors placed on powder magazines, strongly advocated the use of iron conductors in preference to the usual copper ones. The advantages of iron over copper chiefly consist in their comparative cheapness, and lesser likelihood of being stolen or injured, their higher fusing point, and greater mass. A wire rope without any joints, except what are carefully soldered or welded, is preferable to a rod, pipe, or band; and for ordinary purposes Captain Bucknill recommends an iron rope weighing 6 lbs. per yard, or a good copper rope weighing at least 1 lb. per yard. When, however, the conductor is led up one side of the building, over the roof, and down the other side, with an earth connection at both ends, the iron rope need not weigh more than 3 lbs. per yard. Captain Bucknill does not advocate lofty rods reaching a good way above the building, but he recommends that they should be terminated with a set of discharging points.

While upon this subject we may mention that the French Minister of Posts and Telegraphs, M. Cochery, has given orders that all thunderstorms shall in future be recorded in detail at all the telegraph offices in that country. Printed forms of queries to be answered are provided for this purpose, and the plan is so promising, that if it were extended to the general public our knowledge of thunderstorms might be largely increased.

Plastic Metal.

A very useful material which may be described as a metal paste has recently been invented. It resembles ordinary white metal in appearance, such as is used for lining the bearings of axles in railway carriages or machinery, and it has a hard close texture, capable of taking on a high polish. Nevertheless, it can be readily pasted on and spread over another metal by means of a hot soldering-iron, and it adheres to its base with great tenacity. It fuses at a temperature of 450° Fahr., and can therefore be readily melted over an ordinary fire. Containing, as it does, neither lead nor spelter zinc, it may be melted over and over again without deteriorating in quality, and this combination of useful properties must render it a very serviceable article in the colonies, where casting furnaces or other foundry appliances are few and far between.

The Telegraph in Arctic Travel.

An ingenious hint for the use of future explorers in the Arctic regions has been given by Mr. James Gamble, General Superintendent of the Western Union Telegraph Company at San Francisco. He suggests that sledge parties making a dash at the Pole, or striking out across the ice for geographical purposes, should take with them a light telegraph wire coiled on reels, and pay it out along the ice as they proceed. Ice is a good non-conductor, and the wire need not be insulated with any such material as cotton, thread, or gutta percha. A bare steel wire weighing about twenty pounds to the mile will serve the purpose, and as a hundred miles of it would only weigh 2,000 lbs., it need not form a serious drawback to the progress of the party, seeing that it would be paid out as they go. A battery at the ship or starting-point would serve to work the line, and the sea would form the return wire, provided the ice were bored through, and a good "earth" contact for the wire obtained in the water underneath. Mr. Gamble proposes to employ a Morse apparatus to receive the messages, but in our opinion a telephone would answer very well. If the messages were transmitted by the ingenious instrument known as the Theiler Sounder, which transmits musical notes, these could be received on a telephone; and recent experiments at Aldershot have proved that such a message can be transmitted through a bare copper wire laid on the ground. The metal line would be a guide to the explorers on their journey back, and communication with their shipmates would encourage them to penetrate as far as possible.

A New Life-Buoy.

The sketch on the next page illustrates an improved life-buoy, invented by Mr. Whitby, late of H.M.S.

Excellent, and recently tried at Erith with success. Like most buoys it is formed of a hollow ring, divided into air-tight compartments ; but it is provided with



a chain on which the floating sailor can rest his feet, as shown in the figure. By resting his back on the inside of the ring, the person can hail a ship by means of an extemporised flag or lights. The latter are attached to the ring, and the largest of them fires itself the moment the buoy alights on the water, so that its whereabouts may be seen. For foggy weather, too, a shrill whistle is added to the equipment ; and the buoy can be hoisted on board a passing vessel by throwing out a "whip" from the yard-arm, thus avoiding the necessity of lowering a boat in rough weather. It should also be added that the new buoy packs in less bulk, is more buoyant and less expensive than the ordinary service buoy.

Straw and Hay Fuel : a Suggestion.

An American farmer has issued an earnest appeal to inventors for a machine to compress straw and hay with a view to the use of these articles as fuel. He says that over a great part of the West, immense quantities of straw are allowed to rot in the field or are burned in the stack, as in that portion of the continent it is practically worthless. Thousands of tons of wheat-straw are burned every year as soon as it is thrashed, merely to get it out of the way, and prairie hay that costs only the cutting and stacking is simply permitted to rot ; and while all this sad but unavoidable waste goes on, fuel is scarce and high-priced. Why, he urges, cannot this vast amount of hay and straw be compressed, by specially-devised machinery, into bricks of convenient size for burning in ordinary stoves? If machines of this description could be turned out at a moderate price and to work effectually, the Western farmers would largely patronise them and save thousands of dollars annually. Hay stoves are in use in some localities, but are objectionable for two solid reasons. In the first place, a great amount of valuable time is spent in twisting up the hay by hand to feed the stoves. Secondly, the room is kept constantly littered with loose hay. If the recommendations of this American farmer are impracticable in the particular manner indicated by him, it has been suggested that the hay might be utilised in the manufacture of paper and in other industries.

Map Rack for Schools.

The maps used in schoolrooms are usually suspended on the walls, and frequently allowed to remain there throughout the session. Consequently they deteriorate rapidly. The colour fades, and the dust makes them dirty. The appliance represented in the accompanying woodcut has for its object the proper

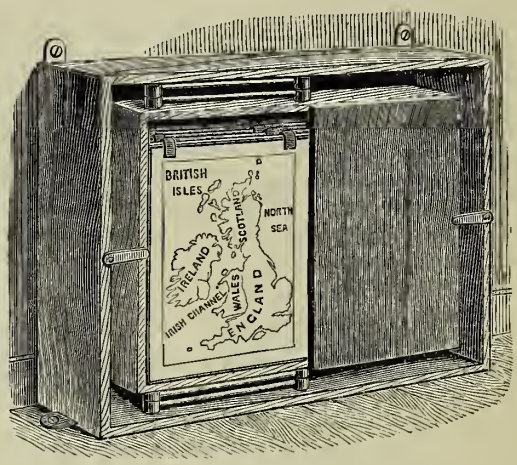


FIG. 1.

exhibition of maps, and also the protection of them when not in use. A reversible frame is supported top and bottom by two jointed arms in a stationary frame fastened to the wall. One half of the reversible frame is covered to form a recess, into which the maps may be pushed when not in use. The maps slide upon rods, and as the frame is reversible they may be viewed from either side merely by turning it. The outer frame may be screwed to the wall or supported upon an easel or other stand. Although the rack will be found particularly serviceable in the schoolroom for the reasons already stated, it is obvious that it can be used in shops or warehouses for the display of large business placards and advertisements. Fig. 1 shows the rack in

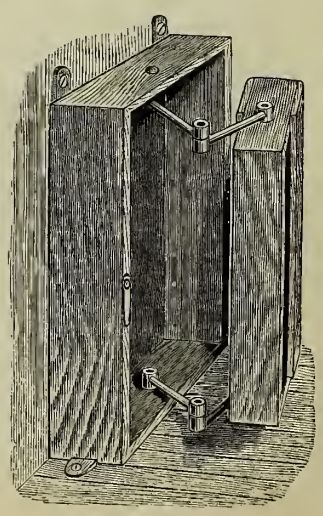
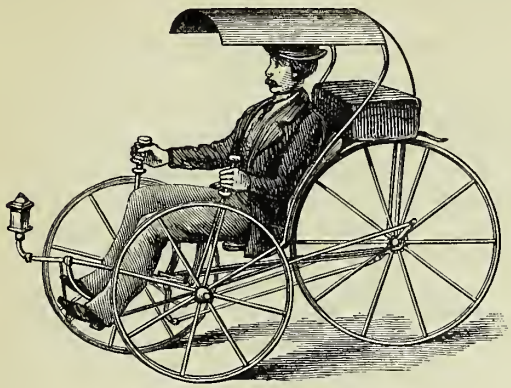


FIG. 2.

proper position during a lesson in geography. Fig. 2 explains the action of the jointed arms in reversing the frame.

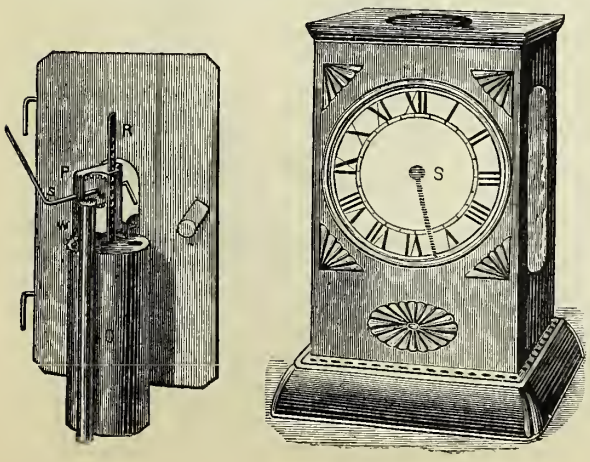


A Tricycle Carriage.

The velocipede represented in the engraving presents, so far as the machine is concerned, similar features to many of the vehicles now coming into extensive use. It contains, however, certain additions which render it a very suitable means of transport to those who are obliged to travel a great deal, the adaptation to such requirements having been suggested by the absence in most, if not all, of the ordinary bicycles and tricycles of a protection against weather. The rider sits in a comfortable chair above the forward axle, and holds the guiding handles attached to this axle, the feet resting upon pedals connected by rods with cranks on the rear axle, and the carriage being driven by the alternate movement of the pedals. The lantern is carried well in front, a canopy protects the rider from rain or sun, while light baggage such as most travellers require is supported behind. The idea of the canopy must be considered as a happy thought, as the want of such a covering has often been severely felt by 'cyclists in the open country when visited by a sudden rain-storm.

A Night-Light Clock.

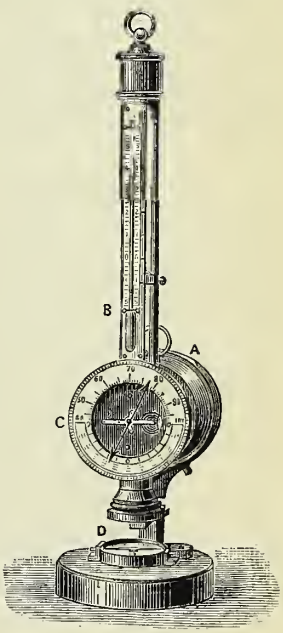
A noiseless clock, which also performs the function of a night-light, has been devised by Mr. Robertson.



In it the sinking level of the oil is caused to actuate the wheelwork by means of a float. This will be understood from the figure, where O is the oil cylinder, in which is a float carrying a vertical rack, R, which gears with a pinion, P, and turns a spindle, S, on which the clock-hand is fixed. The wick is contained in a suitable tube, W, connected with the oil; and as the latter is consumed, the sinking float actuates the hand of the clock. The light of the wick is allowed to escape by glass windows in the sides of the case, and also by the transparent face of the dial.

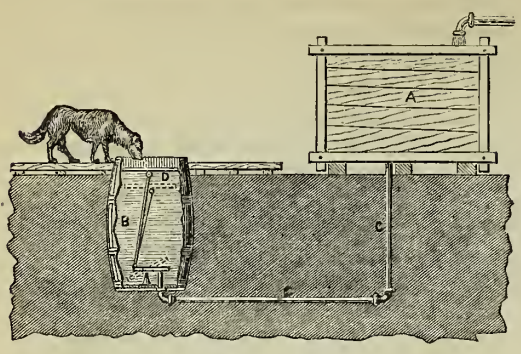
A Portable Meteorological Station.

Amateurs in meteorology will be interested in the apparatus which is illustrated below. It is the invention of M. Georges Sire, and is designed to enable tourists or private individuals to observe the three chief meteorological data, viz., the pressure, temperature, and humidity of the air. For this purpose, a barometer, A, thermometer, B, and hygrometer, C, are combined in one instrument, while a magnetic compass, D, is added for convenience. The barometer is an aneroid of portable construction; the thermometer is a mercury one, fixed upon a metal stem which forms the handle of the apparatus. It is graduated from 25 deg. below to 40 deg. above zero of the Centigrade scale. A hair hygrometer is employed, because it is sufficiently exact for general meteorological observations, and is the only one which will act at altitudes where the temperature is below zero. A scale, C, is attached to the face of the barometer, in order to show at a glance the moistness of the air corresponding to the reading of the hygrometer.



A Fresh Water Supply for Animals.

People are, very naturally, much interested in the question of a constant supply of fresh water for household use, and they will doubtless be glad to learn about a new device for securing the same benefits to domesticated animals. The woodcut on the next page gives a good idea of the working of the appliance, of which the chief recommendation is that it provides a regular supply of clean water, and prevents its waste. A barrel, B, is placed in the ground, and by means of a pipe, C, is connected with a tank, water-main, or stream. Upon the end of this pipe, which projects a



few inches into the bottom of the barrel, rests a pivoted valve, which also communicates with a float, D. This float is so arranged that when the barrel is filled it acts upon the valve so as to close the pipe C. When the animal drinks the level of the water falls, and the float sinking with the water, the valve is tilted up, and the pipe C once more admits the water until the barrel is again filled. By this means the water is always kept fresh and wholesome. When the float has sunk to the position indicated by the horizontal dotted lines in the woodcut, the valve then occupies the position represented by the diagonal dotted lines.

Electrical Steering.

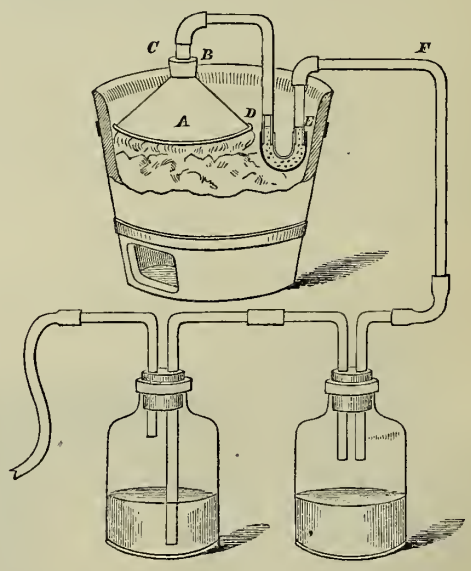
The helmsman's task in rough weather is often an arduous as well as dangerous one ; and the self-steering compass of Mr. W. F. King is therefore likely to be welcomed in the marine, should the practical trial it is now undergoing on an ocean steamer endorse the verdict of experiment. Mr. King employs electricity to enable the compass of itself to steer the ship. He operates the helm by means of a hydraulic apparatus, and in turn actuates the latter by the electric current from a single voltaic cell of the kind known as Daniell's. This is effected by providing the compass-card with an index tipped with metal, and this index is set to the true course the ship has to follow. At one degree on each side of the true course, however, a small metal pin projects through the side of the compass-box in such a manner, that if the ship deviates a degree from the true course, to right or left, the metal point of the index will come into contact with the right or left metal pin, and this contact will complete the circuit of the battery, and send the current flowing to work the hydraulic apparatus which moves the helm. According to the direction of deviation, the helm will be shifted to port or starboard until the true course is recovered. The accuracy of the steering is even greater than that of a practised helmsman ; but as all electric apparatus is liable to fail without warning, it will be necessary to provide a helmsman in case of accident.

A Scented Camellia.

The wax-like flower of the camellia has long been a rival of the rose in point of beauty, but it has hitherto lacked the delightful perfume of the latter. After years of fruitless effort, however, a gardener of the Palazzo Ferentino, at Naples, has indued a rose-tinted camellia with a faint sweet fragrance, resembling the scent of jonquil. Having succeeded thus far, he hopes to endow the white camellia with the like fragrance.

Oxygen from Bleaching Powder.

The usual way of making pure oxygen for the lime-light, or the oxy-hydrogen blow-pipe, is to heat potassium chlorate together with peroxide of manganese in a cast-iron crucible connected to the holder by a pipe. This, however, is a comparatively expensive process, and where cost has to be considered the chlorate of potash may be superseded by common bleaching powder or chlorinated lime. On heating this powder red-hot, oxygen is given off, which may be purified by passing it over or through a small quantity of heated lime. The woodcut shows a simple arrangement for preparing the gas on a small scale, say a few cubic feet at a time. A retort, A, made of sheet-iron, doubly lapped and riveted, is fitted at the neck, B, with a piece of one-inch steam-pipe, C, which is connected by an elbow to a longer piece of pipe, bent downwards below the bottom of the retort, then connected by a second elbow to another pipe bent upwards above the bottom of the retort and leading, by the pipe F, to a condenser and wash-bottle as shown. The space from D to E is filled with granules of quick-lime, each a little bigger than a pea. Two or three pounds of the bleaching powder having been put in the retort, the pipe is cemented at B, with clay or plaster of Paris, and a charcoal fire is applied so as

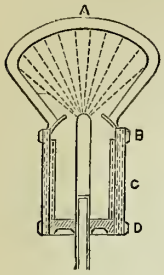


to surround the part D, E, of the pipe as well as the retort. With a good fire ten minutes will suffice to disengage the gas.

Siemens' Bat's-wing Burner.

The luminosity of a gas-flame depends in part on the quantity of solid carbon liberated in the body of the flame, and in part on the temperature to which this

is raised. To elevate this temperature, Dr. C. W. Siemens has contrived the bat's-wing burner shown in the figure. A copper rod, A, is bent so as to gird the edge of the flame, and supported by a hollow cone, B, which directs the air to the flame. This cone is the cap of a series of concentric cylinders of wire gauze, C, carried by a disc, D, attached to the gas-pipe; and these, being heated by conduction from the copper arch, in turn heat the air as it rushes through their meshes to feed the flame. Thus the waste heat of the flame itself is made to heat the blast, and the result is a considerable increase in the illuminating effect of the flame, due to its higher temperature. For in the simple bat's-wing or other burner the inrush of cold air cools the flame unnecessarily.



A Glove Fastener.

Buttons on gloves may be all very well for ornamental purposes, but they are not by any means useful as fasteners. They are either always coming off, or generally cause the gloves to be torn. A new fastener has been invented, which is said to be durable and effective and does not tear the glove. It consists of a hollow stud containing a spring that projects through slots in the sides of the stud and catches on the shoulder of an eyelet as the stud is passed through or into it, thus locking the two together, the eyelet and stud being fastened to the opposite lapels of the glove.

A New Telephone.

A speaking telephone of a new description has been invented by Professor Dolbear, of America. The peculiarity of it lies in the absence of magnets from its construction. As illustrated in Fig. 1, which exhibits a section through the heart of the instrument, it consists of two metal plates or diaphragms, C D, electrically insulated from one another and fixed in a wooden frame. These plates are free to vibrate under the influence of the telephonic message, and the frame is hollowed out so that it can be applied to the ear. The back plate, D, is pressed against at its middle by an adjusting screw, which regulates its distance from the front plate and prevents its vibrating. Only the front plate is thus free to vibrate. Now the current from the telephone line is connected to one plate, while the other is connected to the "earth," or return wire, and the result is that both plates, being insulated from one another and oppositely charged, attract each other. The undulating vocal currents of the message, therefore, set up a vibration in the front plate, which is heard as an audible sound—speech or music as the case may be. The transmitter employed to send the vocal currents is a form of microphone, and the whole arrangement of the circuit is shown in Fig. 2, where T is the transmitter; B, the battery generating the current; and I, an induction coil having its primary

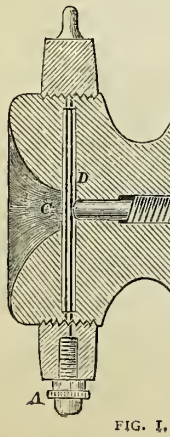


FIG. 1.

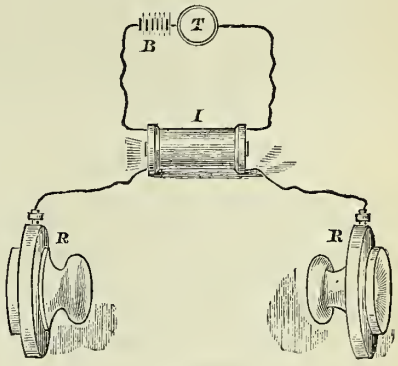


FIG. 2.

circuit connected to the battery and transmitter, while its secondary circuit is connected to the line and the receiving telephones, R R. Only one wire is shown connected to the telephones because, being an induction telephone, a return wire is not absolutely necessary. For if the line be connected to one metal plate, say C, by the screw A (Fig. 1), and the body of the operator, standing on the ground, be connected to the other plate, D, by touching the outer end of the adjusting screw in the case, the two plates will act inductively on each other, and the telephone will speak almost as well as if it had a return wire.

A Cold Light.

A lamp for giving light without heat, and hence termed the psychrophor or cold light, has been brought out by Dr. Michael, of Hamburg. It consists of a glass globe exhausted of air and containing phosphorescent substances in the form of powder. This powder is rendered luminous by electrifying it from a wire or electrode of aluminium, connected to the pole of a Ruhmkorff induction coil. This is performed at will in holding the electrode to the powder by means of an ebonite handle. The intensity of the light is regulated by regulating the strength of the current from the Ruhmkorff coil; but with a weak apparatus it is intense enough to enable a person to read small print when held near the eye. This contrivance will have its use in surgery, where the heat of incandescent electric lamps or other lights is against their use.

An Electric Hoist.

Dr. John Hopkinson, F.R.S., has successfully applied the current from a dynamo-electric machine to the operation of a hoist for lifting boxes and other weights to a height. The hoist consists of a metal

frame, carrying a small dynamo-electric machine within it; and the coil of this machine is connected by means of wheelwork to the pulley which winds up the chain in lifting the weight. An electric current is conveyed by wires to the armature coil of the dynamo-electric machine on the hoist, from the stationary machine which generates it; and as soon as the current flows, the coil revolves and the weight is raised. To reverse the rotation of the armature, and lower the weight, the contacts between the conducting wires and the coil are so arranged that they can reverse the current in the coil at will. Dr. Hopkinson's hoist is now in practical use, and will, we believe, lift half a ton.

A Microscopic Motor.

Probably the very smallest motor in the world is the tiny steam-engine recently constructed by an American clockmaker. It can be completely covered by an ordinary thimble, and weighs only about fifteen grains. It stands but three-fifths of an inch high, yet it is composed of boiler, speed regulator, and cylinder, all complete. No less than 140 distinct pieces have gone to build it up, and these are connected by fifty-two screw-nails. The stroke of the piston is about one-twelfth of an inch, and two drops of water serve to fill the boiler.

A New Water Elevator.

Rotary machines have been employed for raising water during many years, but hitherto they generally consisted of an immovable cylinder, in which the water is circulated by rotating paddles until it acquires sufficient centrifugal force to elevate it through a pipe. The highest lift attained in this way has been 130 feet, but a recent invention of a young French engineer, M. de Romilly, enables water to be raised 500 feet or more. The new elevator consists of a flat horizontal cylinder or pan, fed with the water to be lifted, and rapidly rotated round a vertical axis by means of a pulley. The motion of the pan causes the water to circulate round its internal walls, and a tube reaching down from the height to which the water is to be raised is brought into the pan, and terminated in a curved nozzle turned towards the circulating liquid. The swirling water, by virtue of its momentum, rushes into the nozzle and ascends the tube.

Coir Soles.

The outside fibre of the cocoa-nut, or "coir," as it is called, is now employed in Jamaica for making the soles of boots and shoes. The fibre is incorporated with a glutinous cement under heavy pressure, and then stamped into form. The result is a material similar to leather, and capable of resisting both damp and wear. While upon this subject, we may mention the "Eisoleon," or smooth-soled foot-gear, recently introduced into London. By revolutionising the immemorial practice of fastening the soles with pointed pegs driven inwards, the inventor has obviated all the discomfort which frequently arises from the protruding pegs.

A Family Balance.

In a recent number of the GATHERER we illustrated a handy balance for domestic use which has been brought out in France. It proves, however, to be almost identical with an English balance introduced by Mr. Salter, of West Bromwich, and invented by Mr. Silvester.

Prize Answers to Prize Acrostics.

BY CHARLOTTE P. MITCHELL.

V.

Upon the fifth the potent word I breathed,
And lo! a *Frith* whose waves in tempest seethed;
And, bluff as breeze that blows across the tide,
England's eighth *Henry*, laughing, stood beside.
But as I gazed this frith, the *Forth*, was gone,
And nigh the rapid *Rhine* I stood alone.
Yet not alone; for in the mystic deeps
An unseen spirit sings with voice that creeps
Thrilling through all my being; 'tis a song
Whose verses all dwell lovingly and long
On many a stirring tale of fiercy fight
From *Inkerman* back to the old time when
The lion-hearted Barak with his men
Swept down on Sisera from old *Tabor's* height.
But while I listened came there to my side
Henry once more, who in the rapid tide
Gazed absently! I turned and spoke him there,
But at my voice all swift dissolved in air!

VI.

Oped the last mystic vessel; then—ah, sweet!—
I knelt in rapture at the beauteous feet
Of her, my *Sarah*, loveliest maid on earth,
Of whose sweet smile love in my heart had birth!
But as I gazed she faded, and there stole
Thoughts of *Annette* across my troubled soul;
Maid whom I one time loved; then *Rosabel*,
And *Adeline*, one time beloved as well,
But now almost forgotten. Then said I
Bitterly, "Love is but a butterfly!"
But, ah! a maid more beauteous than the rest
Comes to my soul, a pale unbidden guest—
Helen! oh, anguish! she, the queenly child
Whom, from my arms, a fairer youth beguiled!
I reached my yearning arms and bade her stay,
But she too vanished like the rest away;
Then came a wraith upon whose face was shown
Somewhat of every love my heart had known;
And now 'twas *Sarah* that stood weeping there,
And now 'twas *Helen*, tall and queenly fair.
I started forward, reached my arms and spoke—
But hark! an anguished moan,
And I am turned as 'twere to marble stone;
For lo! the Sphinx hath spread its mighty wings
And o'er the cave a shade of horror flings!
Up through the roof it soars—
A deadly chill across my bosom creeps—
Rent is the roof and the vast ocean roars
Through all its deeps!
Far up the vaulted sea
Hovered the Sphinx a moment over me,
Cleaving the wave with agonised stroke,
Then came a hideous fall—and I awoke!

Chess Problem Competition.—Our readers are reminded that Problems for this Competition cannot be received later than September 1st, 1881.

Prize Essay on True Economies in Household Management.—We hope to announce the award in this Competition in our next issue.

THE PROBATION OF DOROTHY TRAVERS.

By the Author of "In a Minor Key."

CHAPTER THE THIRTY-FIFTH.

LAST WISHES.



IN a room in the Via Sistina, and in the subdued light afforded by jealously-shrouded windows—which admitted neither the hot oppressive air, nor the piercing rays of the June Italian sun—Geoffrey Ingram sat, with pen and paper before him. It was a difficult task he had to perform, for he was writing to Dorothy Travers, to give her a full and faithful account of Harry Leonard's last moments.

And even now, although poor Harry was already buried, according to the Italian custom, within twenty-four hours of his death, it seemed to him like some bad dream or nightmare, from which he must awake. For his patient had made such progress after the first day or two, had repaid by increasing strength Geoffrey's watchful care and tender nursing, that both he and Dr. Campbell had been most hopeful, and all thoughts of sending for Dolly and Maggie—a proceeding which might be attended with much danger—had been put an end to.

Then one night, when they were least dreaming of it, had come a sudden relapse, a deadly weakness, an extraordinary collapse of all the vital powers: some twelve or fourteen hours of intense anxiety, during which time Geoffrey had telegraphed to both the girls, and, with morning's earliest dawn, the peaceful end.

It seemed to Geoffrey as though he had lost a young brother or cousin, some one who was very near to him, so much had Harry grown into his affections during the time that he had been his one thought, the object of his unceasing care and solicitude.

It was no mere formal relation he was writing to Dolly. It was filled with the warmest sympathy, not so much expressed in words, as to be read between the lines; it gave every word and detail, painful in themselves, but conveying so much comfort to those left behind. Nothing was omitted that might be a consolation to Dolly; and there was much—very much—in Harry's last hours to act as a bright light of example to her for all the years of her life. His patience, his uncomplainingness, his tender love and care for her and Maggie, all was told, to be imprinted for ever on her memory. Far away from England, from all he held most dear, he had been tended with a thoughtfulness that neglected nothing; and in the days to come, it was always a happiness to her to know that her Harry had died as he would have died in England, although the clergyman was a stranger passing through Rome.

As Geoffrey wrote sheet after sheet, in his clear legible handwriting, he was aware that he had no time to lose, for the enemy was gaining on him fast, and already his head and all his limbs were aching, and he knew that he was not to be spared. Standing by Harry's grave last night, himself and his servant the only mourners—Antonio had disappeared with the first symptoms of real danger—he had felt a chill creep over him, and had determined to be off to Switzerland as quickly as the train could carry him the following evening.

In the next room his servant was packing up all his and his poor friend's effects. The ivory photograph-case, the locket Harry had worn on his chain, all the little trifles that were most sacred, Geoffrey had sealed up with his own hand. Very little had he left to his faithful Johnson to do; but the writing of this letter was imperative, and he could not delay it.

But it was hard to write to Dolly as though she were a mere stranger—the promised wife of another man; and he wished that the task might have devolved on some one else.

That Harry's one thought had been of her, his last words of her, his one regret, before which all else faded into nothingness—her: all this Geoffrey wrote, his own personality melting gradually away in the interest of the words he was penning. Very little of self cropped up in this letter; it was always, "He was watched," or "He said," rarely "I watched him," or "I sent for so-and-so;" but at the close came a short eloquent paragraph of his own high esteem and admiration for the man who had been destined to be Dolly's husband. And she, when she read these words, took them, as they were meant to be taken, as an apology for that warning against Harry that Geoffrey had given her in their last interview in the schoolroom at Wrangham.

And now the letter was sealed and sent, the packing all done, everything looked to, even an arrangement made that Harry Leonard's grave should be carefully kept and tended in his absence. Side by side with pretty little Mrs. Grey, both of them six weeks ago the incarnation of health and spirits, under the shadow of another very different tomb, Harry Leonard's remains had joined that little company of chiefly English in a foreign land. And, spite of

aching head and weary limbs, Geoffrey drove down there once more, and took his last look at the resting-place of his friend before he put himself into the train, and steamed away to purer air and to a cooler climate.

At Civita Vecchia, whither he had finally decided on turning his steps, he took the steamer, hoping the sea-breezes might set him up again; but when he landed at Marseilles, he found he could go no further, but must make up his mind to give in to be ill, and submit to be nursed back to health, he trusted.

He had indeed a sharp attack, more a return of an old African fever than anything fresh, but his good constitution won the day, and five weeks after Harry's death he was on his way to Dinant, to make the acquaintance of Margaret Leonard, and with his own hands to deliver the note Harry had left to be given to her in the event of his death, as also most of his effects. She apparently was the only near relative he had left of whom he knew anything, which seemed strange to Geoffrey, himself a member of a large and wide-spreading family circle, with cousins in every quarter of the globe.

During this month of illness and convalescence, shut up in a foreign hotel, with no companions and few distractions, he had had ample time for thought and speculation, and it had all focussed on Dolly and Harry, and on the numerous intimate conversations he had held with the latter whilst he was laid up.

After once breaking the ice, the floodgates of the poor boy's confidences had been illimitable, and Geoffrey had been made acquainted with every event, every detail of his and Dolly's simple love and engagement. He had accompanied them into the woods, watched them as they sat side by side fishing in their beloved stream, galloped with them over the wide breezy commons, where the purple heather rose elastic under their ponies' feet, sat with them under the cedar-tree, and had heard Dolly's "Yes" as she promised Harry to be his wife. All this and a great deal more he had had poured into his ears during the short restless nights and the hot wearisome days in the Via Sistina, and it had seemed to him that it was some idyl or pastoral that he was listening to, in which two happy children, living in Arcadia, had, after growing up together, plighted their troth to each other, quite convinced that life would continue to roll on as placidly and happily as hitherto.

With this period of her life he never connected the Dolly of latter days. It was always the sweet child-face, with the promise of so much to come, that he had first seen standing by Ferdie's couch, so different, and yet so like the Dolly two years later, when the child had developed into the woman, and the trusting look been replaced by one of waiting and patience—so different, and so superior.

And somehow—he could not define why—he vaguely felt that the first Dolly had belonged to Harry, but that the second had glided into his possession. It was absurd, ridiculous, he argued with himself; but still the conviction remained, and grew with his returning strength, until it began almost to assume the proportions of a certainty. So absorbing, so all engrossing was it, that even as he neared Dinant he had very little thought for Margaret Leonard, she who had lost her only near relation, her only brother, and not till he stood in the presence of the tall thin girl, all angles and nervousness, did he realise what a painful task he had before him. Margaret and Harry Leonard, separated in early childhood, knew really far less of each other than did the latter and Dolly, but had nevertheless always retained a strong affection for one another, in spite of the great dissimilarity in their characters.

This affection existed probably more in idea than reality, but it was kept alive by occasional letters, occasional rare glimpses of one another, and, on Margaret's side, by a romantic enthusiasm for her brother, whom she believed to be the possessor of every cardinal virtue. When at last released from school, she had resolved she would become really and practically acquainted with Harry, and for this end had spent a very happy six weeks, only this last summer, with him in Switzerland. The time thus passed in each other's society had amply effected Margaret's object, that of learning to know her brother. The process was rapid, for she had a keen insight into character, and although Harry was in some respects unlike what she had expected, yet she saw no reason to alter her former estimation of him. It was doubtless a disappointment, yet it made very little difference to her, that they had not many ideas in common; she still believed him to be possessed of every virtue, and more she could not ask.

She had listened patiently to his rhapsodies about Dolly, whom she well remembered, feeling keenly the while that she had only found a brother to lose him again, and on her side had evinced such an insatiable and omnivorous thirst for knowledge as had fairly appalled Harry. She inherited all her father's tastes, as well as his features, would spend hours poring over books on the most abstruse subjects, and having been educated in Germany, where no restraint had been put on the nature of her literature, had swallowed eagerly much that was speculative, misty, and unorthodox, that would have been put out of the reach of most English girls of her age. Shy, nervous, irritable, and sensitive, she was the very reverse of her placid, good-tempered brother; but nevertheless they got on extremely well together, and Harry had been much disappointed that Mrs. Burslem, his aunt, had not consented to his request that she and Margaret would spend the winter in Rome with him.

The brother and sister had, however, agreed that the former should return to England for the shooting season, and that Margaret should then take up her residence with him, and keep house until such time as she should marry. All these pleasant schemes had ended with Harry's untimely death, and Margaret was left to mourn, with the intensity which was a characteristic of all her feelings, her only near relative, and at the same time to inherit a large fortune and splendid estate, for which she cared nothing.

It was painful to see the girl's nervousness and shy-

ness, as Geoffrey, tall and gaunt from his recent illness, was ushered into her presence by the French servant, who was much scandalised that "*Mademoiselle*" had been asked for, instead of "*Madame*," and who quickly disappeared to fetch the latter, in order that "*les convenances*" should not too long be outraged. It was hard for him to realise that this girl, with the awkward figure and ill-made black dress, who had apparently so much trouble in disposing of her long thin arms, should be the possessor of Holme Regis—his Holme Regis—and many thousands a year, and it seemed like a cruel turn of fortune which had brought her these advantages, for which nature had so obviously not endowed her.

It required all Geoffrey's tact and *savoir faire*, all his gentleness, to put her at her ease. She persisted in remaining standing, distorting her long nervous fingers, and glancing at him shyly from time to time from out of a pair of burning deep-set eyes, overhung by massive black eyebrows. And yet he could see that she was trembling with excitement and emotion in every limb. He commenced at once on the subject they were both thinking of, and with the mention of Harry's name the trembling ceased, and the interlaced fingers fell apart.

When Mrs. Burslem glided into the room, she found the two still standing, it is true, but actually conversing together: that is to say, Geoffrey was relating, and Margaret listening. She and her niece knew all about Mr. Ingram from Harry's letters, and were perfectly aware that his father had been the former owner of Holme Regis. She received him with much warmth and cordiality, persuaded him to stay for lunch, and told him that, had he been one week later, he would not have found them at Dinant, as they were on the eve of their departure for England and Holme Regis.

There was so much to say, to tell, and to ask, that at the end of an hour or two Margaret and Geoffrey felt like old friends; and when the subject of Harry's engagement was broached by Mrs. Burslem, and it was discovered that Mr. Ingram also knew Dorothy Travers, it seemed even further to draw them together.

He was greatly surprised at the dark look that came over Margaret's face with the mention of Sir Augustus.

"How I hate that man!" she exclaimed, and she certainly looked as though she meant it. "If it had not been for him——" and she stopped, arrested by the flood of "might-have-beens" that occurred to her.

Mrs. Burslem, annoyed at her niece's vehemence, remarked apologetically that "Margaret was a good hater and a warm lover," but there was no necessity to make excuses to Geoffrey. Well he understood the girl's feelings, and sympathised with them, for his own for Sir Augustus and Lady Travers were just now anything but cordial.

And Margaret, led on by his "understanding" look, made many inquiries after Dolly, whom she had not seen for so many years, and whom she remembered so vividly, more in the character of a water-sprite than anything else.

"Have you heard from her?" asked Geoffrey, and was sorry he had put the question, for Margaret's eyes filled with tears as she answered monosyllabically, "Yes."

"Such a terribly sad letter," supplemented Mrs. Burslem. "I never read anything so heart-broken. It was really morbid, for there was so much self-blame in it; and yet, poor child, it was no fault of hers that she and dear Harry were not married years ago."

"No, indeed. And since then, have you heard again from her?"

"No, for I am sorry to say she has been ill. We have had one or two letters from Mr. Bruce, saying they were anxious about her, but for the last fortnight there has been no further news, so I hope she is better, in fact convalescent."

"I hope so, indeed. I shall see her, on my return to England; at least, I intend so doing."

Not until he had to start by the evening's train did Geoffrey take his leave of the two lonely women, who were full of anxiety for his health; but by the time he left the house Margaret's shyness had almost vanished, and she had asked him many questions that lay next her heart. He had given into her own hands Harry's last important letter, had consigned to her care his effects, and had offered to do anything he could for her in London, or at Holme Regis. Mrs. Burslem was charmed with him, the more so that he was an Ingram, a race that, with its long and far-stretching line of ancestors, she venerated all the more that she was heartily ashamed of her own grandfather. For she did not possess her brother's honest dignity, which, lifting him above such considerations, had made him, from the hour of his birth, a gentleman, although a highly eccentric one. Besides, she was a woman, and as such she had not failed to note Margaret's unusual animation when conversing with this stranger. It would be difficult to say what mental visions were passing through her brain as she bid Mr. Ingram a warm adieu, pressing him to come and stay at Holme Regis in the autumn, a request which Margaret seconded with quite an eloquent look from her dark eyes.

Geoffrey, all unconscious of the schemes by which Mrs. Burslem was trying to readjust the inequalities of life, thanked her heartily for the invitation, shook hands warmly with Margaret, and was soon speeding towards the station, towards home, towards Dolly. Long after his departure Mrs. Burslem sat on in her *salon*, thinking and knitting.

"Poor Maggie!" she murmured to herself, as she rose at length to pass into an adjoining room; "with all that money, she will need a protector, and nothing could be more suitable in every way. Of course he will take her name, and Leonard-Ingram is an excellent combination."

Up-stairs, in her room, Margaret was reading Harry's last message, with long deep-drawn sobs, his photograph in her hand. At the conclusion, she solemnly

kissed the likeness. "My darling!" she exclaimed aloud, "I will do all that you wish."

So Margaret, too, was looking forward.

CHAPTER THE THIRTY-SIXTH.

LORD AND LADY MARSLAND.

IT was on a lovely sunny afternoon, about the middle of July, that Geoffrey Ingram dashed up to the Travers' house in Lowndes Square, in a hansom, and found his progress impeded by a brougham and pair that stopped the way.

Accordingly he alighted, paid the man his fare, and, perceiving a good many carriages about, and a small crowd collected round the doorway, began to wonder what was going on. It was just half-past two, too early for an afternoon party. Why, it must be—yes, of course it was—Rose's wedding-day, and the brougham with the coronet on it was evidently awaiting Lord and Lady Marsland to take them to the station.

Well, as he had arrived at an inconvenient time, he would wait a few minutes among the lookers-on till the hubbub had a little subsided. Evidently the bride was near at hand. The front door was open, and from the hall issued sounds of bustle and of preparation that betokened an immediate departure. Not far off stood a cab, laden with new boxes and travelling baskets, on which shone out conspicuously, freshly painted, "R. M."

And now the crowd grows larger, the balcony fills with guests, and the bridesmaids line the porch, to throw old shoes after the happy bride and bridegroom. Lord Marsland appears for a moment with a cigar-case in his hand, and commences joking with one of the pretty girls who are standing by him. Geoffrey eagerly scans that group of white-robed maidens, but does not see, as he knew he should not, the one who would have been their chief ornament.

Then the door opens wider; there is a suppressed buzz in the crowd, and this time Rose comes down the steps on her father's arm. She looks neither to the right nor the left, or she might perhaps have perceived her old friend's tall, gaunt figure towering above the spectators. She is very pale, and her lips are tightly compressed as Sir Augustus puts her into the carriage, his solemn face wearing an expression of self-satisfaction that makes Geoffrey think of Margaret's "How I hate that man!"

"Sold one daughter, and broken the other's heart," he thinks to himself; but his attention is diverted to the bridegroom, who, with heated, flushed face, is calmly waiting to enter the carriage till he has lighted his cigar.

"The cub!" murmurs Geoffrey. "Poor Rose!"

But the brougham has driven away amid a shower of well-directed shoes; there is a good deal of laughing and talking going on between the groomsmen and the bridesmaids as the latter retreat into the hall. Geoffrey runs up the steps in their wake, and, entering the house, is received by Graves with an astonished smile of welcome. Lou is in the rear of the procession. She has strained her eyes to the last after the rapidly retreating carriage, and is walking slowly and sadly, whilst furtively wiping a tear from her eye, behind her companions, when she feels a detaining hand laid on her arm. She starts, turns round, and gives a little gasp of surprise as she recognises Mr. Ingram.

"Geoffrey, you here! Where have you sprung from? And, oh! why did not you come in time for the wedding?"

"Hush, Lou! I only want one word with you. Come in here;" and he opens the door of the back dining-room, and draws her into it.

"But, Geoffrey, how dreadfully ill and thin you look! What is the matter? And where have you been all this time, since Mr. Leonard's death?"

"I have been ill myself at Marseilles, but I am all right again now. Sit down, for, if you can spare it, I should like five minutes' talk with you."

"I will go and tell mother, and you must have some of Rose's wedding-cake and drink her health.''

"Thank you, my dear, but your mother has far too much to think of just now to be troubled with me, and you too, poor little Lou, so I will not keep you. I only want to ask one question: Where is your sister? and how is she?"

"Do you mean Dolly? Why, don't you know? She has been most dreadfully ill again; they thought a fortnight ago that she could not possibly live; she was really at death's door. Father and mother went down to her, and the wedding was to be put off, and then, when all hope was over, she took a sudden turn, and has been getting better ever since, poor darling!',

"Then she is at Holme Regis?"

"Yes, with the Bruces. Fancy, Geoffrey, Dolly being engaged to be married all these years, and we none of us—not even Rose—being told of it. But of course you know all that, for you were with Mr. Leonard when he died, were you not?"

"Yes. But you say that Dolly—that your sister has been ill again. Had she, then, been ill before?"

"Yes, she was very ill after Ferdie died and you had gone away. She was staying with the Bruces at the time, and they nursed her through the fever—it was typhoid—and she got pretty well and strong, and came up to us here in London to have some drawing lessons. Then, when she heard of Mr. Leonard's death, she went back to the Vicarage, and there she had a return of the fever, and was, as I tell you, at death's door. They say it was terrible to hear her when she was delirious, always repeating over and over again that she was so wicked, that she had broken her word, and begging Mr. Leonard's pardon. So funny, was it not? for she could not help papa's refusing his consent to her marriage."

"Poor child! poor child! Do you think, Lou, that I might see her if I went down to Holme Regis? I have much to tell her of poor Harry Leonard, but I suppose she could not bear it now."

"I am sure she could not. She is still very, very ill and weak, but out of all danger. At present she is allowed to see no one. I am to go down in a fortnight's time, when father and mother and the boys go to Wrangham, and stay at the Vicarage with her. I

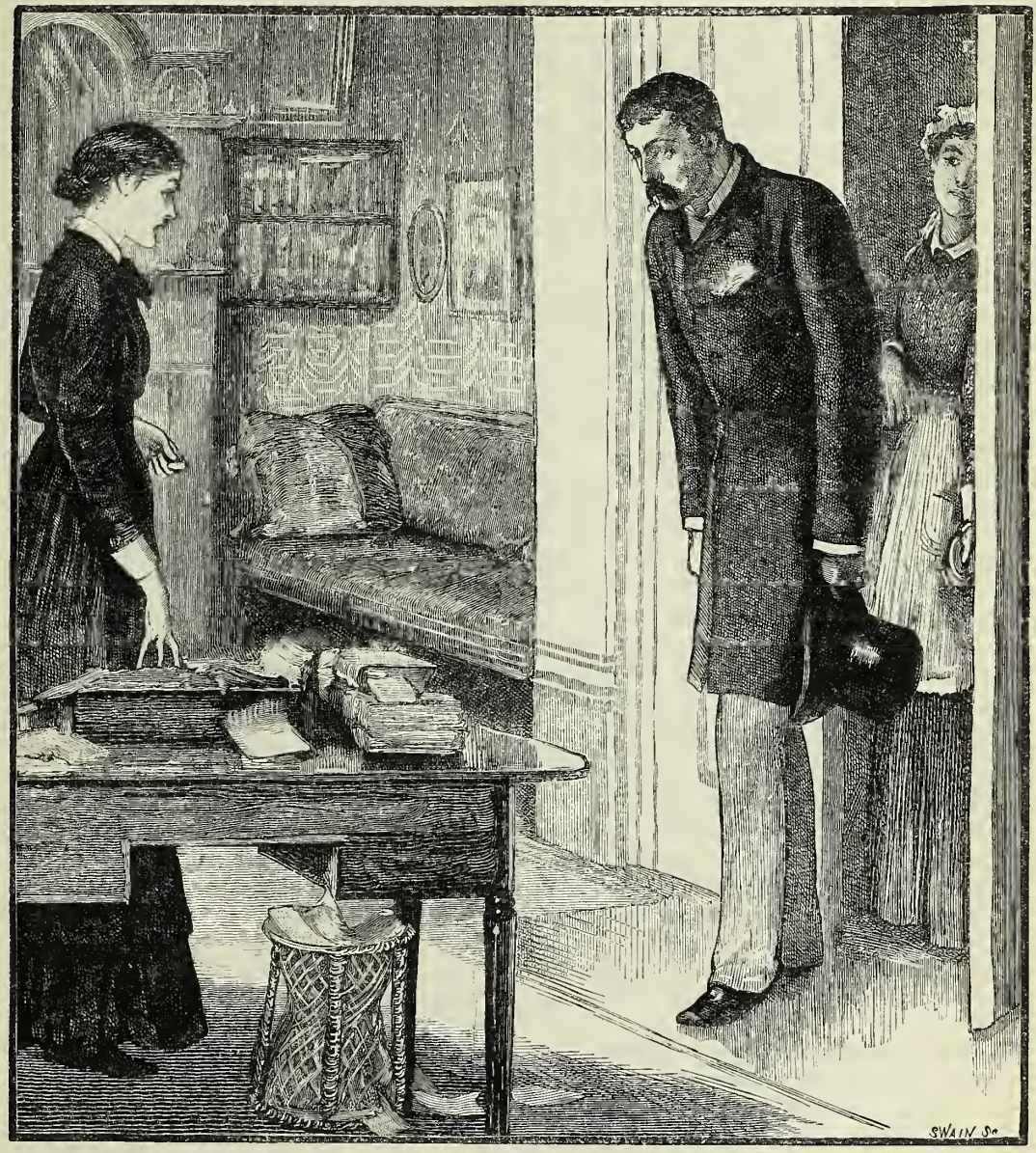
shall enjoy that. Ah! there is mother; I hear her calling me. May not I tell her that you are here?"

"No, dear, you had better not; you see, I am not in wedding gear. Good-bye, Lou; and thank you for telling me so much when your thoughts must have been all with Rose. I will go into the dining-room and get something to eat."

"Good-bye, then, Geoffrey. You must not thank me, only promise that if ever I am married you will come to my wedding. I should not consider it a proper marriage unless you were present, and I should as soon think of its taking place without papa."

Geoffrey smiled. "I give you my word, Lou, that if I am alive when you take unto yourself a husband, I will come to your wedding on one condition—that I approve of the gentleman."

Lou laughs, slips out of the room, and runs swiftly up-stairs to her mother, whilst Geoffrey retires into the dining-room to drink Lady Marsland's health.



"GEOFFREY, TALL AND GAUNT FROM HIS RECENT ILLNESS, WAS USHERED INTO HER PRESENCE" (*p.* 643).

In truth he needs refreshment, for he is still an invalid, and all the travelling and excitement have done him no good. He shudders as he thinks of Dolly at death's door—Dolly, so young, so beautiful, lying helpless, with her wings spread out to take her flight to Harry. What did it mean—all this self-blame to Margaret, this delirious self-reproach? Had she not with her own lips told him she had been anxious to marry Harry from the first, and her father would not hear of it?

And now, what shall he do next? Drive straight to Paddington, and take the first train for Holme Regis. That is the best plan he can think of. He must hear more of Dolly, know how she is, see Mr. Bruce. He looks at his watch and finds that he has still more than half an hour to spare before his train starts: ample time, therefore, to pick up his portmanteau and get to Paddington, and to-night will see him near the old place, the home that he has never re-visited since he left it a boy, nineteen years ago. Graves waits on him with decorous *empressement*, a cab is called, and before many minutes have passed he is rolling, refreshed and invigorated, on his way to Holme Regis.

He had spoken truly when he had told Harry that he knew every stick, every stone, about and around the place. They were engraven on his heart in indelible letters. The sale of his home had changed his whole life; it had embittered him against his father, it had made him cling even more closely than before—and that was difficult—to his mother. And Mr. Ingram, the gambler, had felt, although there was no demonstration of the same, that his boy—his manly, clever, honest boy—despised him. Yet Geoffrey had not altered in his manner to his father, had shown no outward resentment of the act that had turned him from a bright, joyous lad to a grave and sober youth. But deep down in his heart he found he could not forgive the man who had gambled away his inheritance, neglected his mother and well-nigh broken her heart, and spent the few remaining years of his life moving from Spa to Homburg, from Homburg to Baden, from Baden to Monaco, till death overtook him. Then, and not till then, did Geoffrey feel that the old love for his father was only dormant, not extinguished, and the gambler died in his son's arms, with the full assurance of his forgiveness.

All that was long ago now, yet Holme Regis still remains, and to-morrow morning he will see it once more, see it in the full glow of summer beauty. For to-night he must put up at the neighbouring town, for the shades of evening are falling fast, and there is nothing to be done but an idle stroll by the river-side, and a cosy dinner at the little old-fashioned inn.

The morning breaks bright and beautiful, and Geoffrey, having secured the only decent vehicle in the place, a rather broken-down dog-cart, is soon on his way to Holme Regis. As he drives from the town, some three miles distance, through leafy lanes and open common, all purple and gold with heather and gorse, and catches the first glimpse of the blue-green Scotch firs that lie at the back of the house, straight and regular as a regiment of grenadiers, with their long brown stems standing out against the clear cloudless sky, and his ear hears the sound of the brawling stream that runs at the bottom of the park, he cannot believe that nineteen years have passed over his head since he was last here. It is all just the same, nothing altered; at any rate, not up to this point—some few new cottages, a steeple to the church, that is all.

But now a turn in the road has brought him to the first lodge. Yes, there stand the wyverns as of yore—the nineteen years have passed lightly over their stony heads—the old Marshal Niel rose still clambers about the deep oriel window of the lodge, and thrusts its lemon-coloured head in at the open window. Through the iron gates—famous gates they are, for they were brought at much cost and labour from Italy many, many years ago—he can see the deer browsing under the great beech and elm-trees, and far away up the drive he can just catch sight of the tracery of the east window of the chapel attached to the house.

But the man who is driving him does not stop, does not even turn his head to gaze upon what seems to Geoffrey, as it had to Harry, the sweetest spot on earth. Stolidly he drives on, and now they come to the village, and here at last there is a change. Masonry and scaffolding, flaming red brick and cool grey stone rustic porches, model gardens, a working man's club, a village hospital: truly Holme Regis is far advanced in the path of modern civilisation. On all the new buildings is carved an "L" and the date, some of this year, some of last. On one or two stands the old familiar "I," reaching back into the time of Geoffrey's grandfather, but they are few and far between. Then he comes to the church, where generations of Ingrams sleep peacefully—the church-yard is bright with scarlet geraniums, and the scent of the roses is borne on the soft July air—and so on, past the second lodge, to the Vicarage gates.

Here he stops the dog-cart, and dismounting, walks up the drive, and finds himself in front of the familiar house, with its weather-stained stone porch, its roses, and its glorious old cedar-tree. The windows stand wide open; a dog barks in the sunshine, lazily blinking its eyes at the new-comer; the water murmurs cooingly, as Geoffrey gently rings the bell. To the maid-servant who appears in answer to the summons he gives his card, and hearing that Mr. Bruce is at home, asks if he can see him.

Uncle Tom is seated in his den, busily writing to Margaret Leonard on the subject of her return to Holme Regis, when the door opens and the servant brings him in the card. On seeing the name inscribed thereon, he frowns, for he has some time ago formed his opinion of the owner of that card, and it is no favourable one.

In a general way, having known none of them, he has mentally come to the conclusion, founded on what he has heard of Geoffrey's father, that all the Ingrams are scamps, and lately he has unhesitatingly included the present man in the same category.

For he has discovered Dolly's secret, partly revealed in an agony of self-reproach by herself, partly disclosed in her delirium, and considers that Mr. Ingram, perfectly aware of her engagement to Harry Leonard, must have deliberately and basely laid himself out to win her affections. What chance had a young and trusting girl, her betrothed far away, her engagement unacknowledged, against a fascinating man of the world, who chose to make her heart the sport of his idle moments? No doubt he had been fond of Ferdie,

had nursed Harry most attentively, but then any Englishman would have done the same, and the probabilities were that he was not utterly bad.

So Uncle Tom scans the small piece of pasteboard before him for full two minutes before he unwillingly tells the servant to show Mr. Ingram into the drawing-room, whither he himself slowly repairs.

One glance at Geoffrey's countenance, the first few words he speaks, goes a little way towards shaking his conviction of his scampishness. At the end of an hour he is not surprised that poor little Dolly should have fallen a victim to his fascination ; at the end of two hours he is prepared to offer him hospitality in the shape of bed and board, but for the presence of the invalid in the house ; and when Mrs. Bruce comes down-stairs from the sick-room, she finds her husband looking happier and cheerier than she has known him since the sad news of Harry's death reached England.

Yet his and Geoffrey's conversation has turned solely on Harry and Dolly—just now two very mournful topics. All that Mr. Ingram would fain have told the latter has been told to Mr. Bruce, for he has been informed that by no manner of means, if he stay in England for weeks, may he see Dolly herself. So he can only ask questions about her, hear of her miraculous escape from the jaws of death, and relate in his turn his sad experiences with poor Harry in Rome. By degrees, as time wears on, they stray off to other subjects, and Mr. Bruce finds himself pressing this wolf in sheep's clothing, as he had not so long ago dubbed him, to return the next day to lunch, and go with him to see some wonderful Roman remains in the neighbourhood that have been discovered only lately. But Geoffrey is compelled to refuse ; he has urgent business in London, and Holme Regis, with its many associations, is just now peculiarly painful to him.

So he bids adieu to his host and hostess, with many expressions of sincere regret at not seeing Dolly ; and Uncle Tom, loth to part from his newly-made friend, accompanies him down the drive as far as to the gate. As they step out on to the trim gravel path, Mr. Ingram stops to look at the cedar-tree, and to make some remark, *apropos* of the new buildings in the village, but his words are arrested by Mr. Bruce, who puts his finger suddenly to his lips to indicate silence. Out of earshot of the house, he turns round and apologises for his interruption, explaining his action, with a slight confusion of manner which does not escape Geoffrey's notice.

"I was afraid," he says, "that Miss Travers, whose window looks out on the front, might hear your voice, and she is still so weak and nervous that anything of that kind might upset her."

Geoffrey accepts the explanation without comment, merely registering it, as he has many apparently trifling words of late, in his memory, to be thought over and digested at his leisure. Shaking hands heartily with Mr. Bruce, he turns his back resolutely on the spot that contains all that he holds most dear, whilst Uncle Tom walks slowly and musingly back to the house. At the door his wife meets him.

"She is fast asleep," she says reassuringly ; "she heard nothing either of his coming or going ;" then adds, with all a woman's positiveness, although in a whisper, "Tom, that man is in love with Dolly."

CHAPTER THE THIRTY-SEVENTH.

IN THE GALLERY AT RUSHBURY.

"I WILL never see him again, never !"

So Dolly Travers, in the first freshness of her grief and remorse after Harry's death, had inwardly resolved with respect to Geoffrey Ingram, striving in this fashion in some small degree to expiate her offence, committed unintentionally against and all unknown to the dead man.

Hitherto, for it was registered more than two years ago, she has kept her resolution bravely. Yes, it is two years and a half and more since she bade Geoffrey good-bye in the school-room at Wrangham, and looked, as she fancied, on his face for the last time : over two years since she was told on that bright summer's morning that her Harry—her dear, loving Harry —was dead.

And in this, her resolve, she has been ably aided and upheld by Lady Travers, for although the two women have never exchanged words on the subject, each knows that she has a support in the other. Since that February that saw his departure, the gates of Wrangham have been closed to Geoffrey Ingram, its stables no longer know his horses, his name is seldom if ever mentioned, except by Lou, and the man who was once as a brother or an uncle among them all is now apparently forgotten.

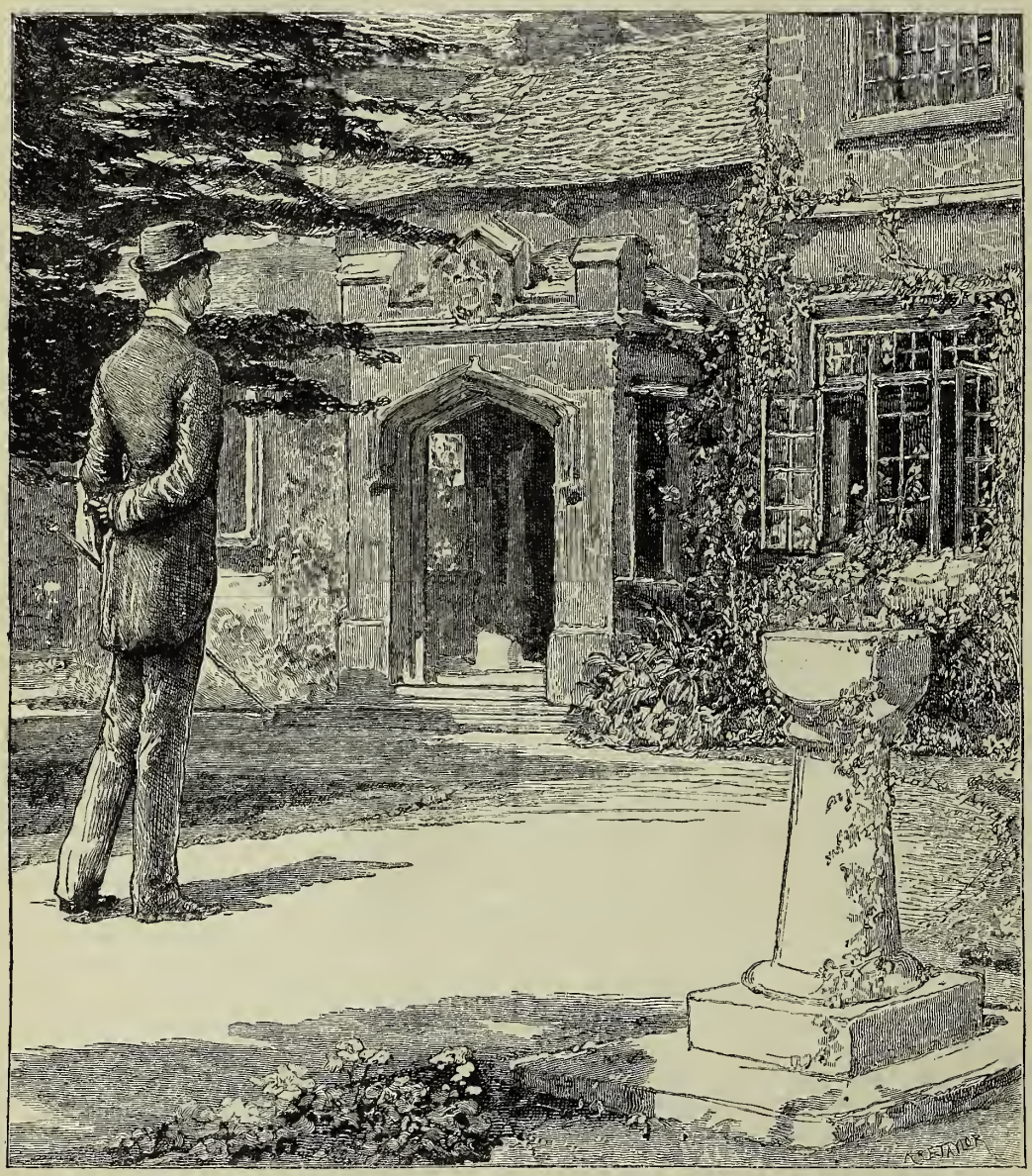
And yet he comes to England regularly every year, corresponds occasionally with Lady Travers, and has even gone so far as to invite himself to Wrangham, and—been refused. Very politely, very charmingly, of course, but still it was a refusal. He has never made the attempt again. There is always London, he hopes and thinks, where in the course of time every one is to be found ; but again he finds himself mistaken, for after that one triumphant season in Lowndes Square the Travers' appearance in the metropolis is confined to a month or so spent with Rose, in which Dolly does not participate. He would have made Rose his confidant, have told her of his yearning to see Dolly, but that Rose Travers and Rose Marsland are two very different people.

Cold, lofty, impassible, her manner to the friend of her childhood is that of a woman to a fresh acquaintance. Her youth, her brightness, even her interest in life, seem to have fled with the assumption of her coronet, and rumour says that her Medusa-like exterior is only a mask to cover her utter detestation of the unworthy man she has married. Be that as it may, Rose is seldom seen to smile, still more rarely to laugh ; all her father's solemnity has been brought out by her misfortunes, as that golden dream of the perfect subjugation of her husband has proved an absolute failure. Lord Marsland neglects her ; her child, a little girl, fears her. The one person she cares to have about her—for she, too, has suffered—is Dolly. In

the country or by the seaside, whenever she can get away from the man she despises and hates, it is pleasant to be accompanied by Dolly, with her low, deep voice, her nice thoughtful ways, her perfect tact and temper. And for her sake she consents to her "something better than his dog, a little dearer than his horse."

And Dolly? How has it fared with her during these two long years?

The agony of remorse, the ceaseless self-reproach,



"HE WALKS UP THE DRIVE, AND FINDS HIMSELF IN FRONT OF THE FAMILIAR HOUSE" (*p.* 646).

see more of her child, and suffers the white-faced blue-eyed baby, the image of her father, to be placed on her lap, and to give her shy, constrained kisses.

Two years only, and yet it seems to Rose like a hundred years since she vowed to "love, honour, and obey" the man she detests, yet must live with. Certainly he gives her but little of his company, but that little is too much, and to escape from him with Dolly seems Elysium after a month spent with one who holds

have been laid to rest, though perhaps not absolutely banished, and she is happy with a quiet, self-forgetful happiness, that seems to have for its end and aim the welfare of others. At Wrangham she is the one they all look to; even Lady Travers—grown so much quieter since Rose's unlucky marriage—and Sir Augustus say, "Ask Dolly;" her brothers always write to her when they want anything done; and Lou clings to her with the tenacity of a weak nature which needs the support of a stronger one. Rose demands

her, with an imperiousness that will take no denial; and she is always willing to answer to that call, if she may but lighten by a feather-weight the trouble which she sometimes fears may drive her sister to recklessness. Margaret Leonard claims her for a month every summer, and the Bruces for two or three weeks, and thus for a short period of her yearly life she looks unflinchingly upon the mingled mementoes of both Harry and Geoffrey, bravely renewing her pain, and, with it, her resolution.

Joan's mantle has fallen upon her to a certain degree, but not altogether, for such an illness as she has gone through has left its traces behind, and although she has the will, she lacks the strength to be an able successor to her energetic cousin. So she is compelled to lead rather a home life, and consent to be considered "not strong," a considerable trial to one so young and active in her tastes.

Lady Travers is kindness itself. Nothing can be more admirable, she considers, than Dolly's behaviour. She has taken Harry's death in such a perfectly right spirit, dedicating her life to his memory, that she deserves every consideration at home. Besides which, she is genuinely fond of her stepdaughter. She admires in her all the qualities that she lacks herself: her honesty, her truthfulness, her perfect reliability, her sweet sunny temper and love of fun—such a contrast, she is obliged to confess, to Lou, with all Sir Augustus's dulness allied to well-meaning tactlessness, which makes Rose—grown so irritable now—say she would rather have any one with her than Lou.

It is a glorious morning in October, a really beautiful autumnal morning, when the sky is clear and blue, the air fresh and frosty, and the sun shines down bright and strong on the changing foliage of the red, brown, and golden trees—such a morning as makes Dolly feel glad when she looks out of window, and yet gives her an aching sense of pain afterwards. For it has been a dull, rainy September, and this is the first really fine day, the very beauty of which, whilst filling her with gladness, gives her a mysterious thrill of pain, such as is often the accompaniment to the sight of the beautiful, an undefined vague longing for yet more, speaking of what lies beyond.

But she has not much time for these unprofitable musings. She has promised Joan to drive over and lunch at Rushbury, and finish a drawing she is making of little Alice, the youngest child and her father's darling. Old Lady Rushbury's health is fast failing; the children, spite of governesses and nurses, are too much for her; and, when she can be spared from Orminster, Joan Travers spends most of her time with her old friend, where it is difficult to say who make the most of her, the children or their grandmother. And she has no hesitation in going, for by no word or sign has Lord Rushbury ever renewed his suit. He seems to have accepted his fate with gentle resignation, putting his whole heart and soul into his absorbing hobby, the collection of such valuable books, MSS., pictures, china, and plate as have made his great gallery famous, and annoying Joan by the quiet indifference with which he fulfils all his most obvious duties.

This time she is come to spend a short three weeks with her friends, and has found herself looking forward beforehand to the time with a keenness which has provoked her more than she cares to own. She and her cousin have become fast friends. Harry's grave has opened out to Dolly the hearts of all her Travers' relations; an unspoken anger at Sir Augustus' conduct has stirred up their warmest sympathy for his daughter, and made her a favourite with them all.

To-day, then, is to see the last touches put to the likeness of Alice's baby-face, and the good-byes spoken between the two girls, for Joan is returning to Orminster before the end of the week.

END OF CHAPTER THE THIRTY-SEVENTH.

THE TRAINING AND WORK OF THE ELEMENTARY SCHOOLMASTER.

THE education of the people has in these days come to be rightly considered as a question of paramount national importance. The Elementary Education Act of 1870, which it may be that posterity will after all account the greatest legislative achievement of the Parliament that passed it, has familiarised every town, district, and remote hamlet of our land with at least the bodily presence of the schoolmaster. To-day this gentleman is ubiquitous. Yet his training, his work, and his prospects are still the subjects of strangely-mistaken notions, we fear, in many minds. In the following paper we desire to set his career fully forth in the uncoloured light of facts.

Time was when the elementary schoolmaster was not a very learned person. He taught the "three R's," and scarcely himself went beyond them. We have changed all that. The term "Elementary" receives now a very wide latitude of interpretation indeed, and the primary teacher is as vastly superior in attainments to his predecessor of bygone generations as is the railway locomotive of 1881 to the tentative efforts of Stephenson.

Very many of the most successful present-day schoolmasters may be said to develop naturally. A proved aptitude brings them into the profession. This is the way of it:—

James Brown (for example) has distinguished himself in the classes of the National School, Warbury, for diligence and acuteness. He seems to possess tact and teaching power as well; and the master lightens his own and his assistants' toil by putting him in charge of some of the younger boys, occasionally, as temporary monitor. Step the first.

The trust is not abused. Experience begets a liking on the lad's side also, and he becomes ambitious to find himself on the regular school staff. His master is pleased at the idea, and his parents raise no objection. Hence, James Brown's services are brought in due course to the notice of both the Government Inspector and the School Managers. They approve his candidature, and he becomes a stipendiary monitor. Step the second.

Age permitting, which must not be less than fourteen *completed* years, the lad applies to be duly bound as pupil-teacher. He has to be examined and passed by the Inspector (who is, upon most points, the school dictator), and must produce testimonials as to health, personal character, and fairly favourable home surroundings. All this is small trouble to James Brown. He passes each successive ordeal triumphantly, and is formally apprenticed for five years.

Annual examinations of increasing rigour and importance follow; and, in the case of our friend J. B., are won through.

The rate of remuneration during this probationary period is to be regulated, in the precise words of the code, by "the discretion of the parties, having in view the local rate of wages and the advantages of the school as a place wherein to learn the business of a teacher." In the vast majority of cases it is very small.

Emerging from his engagement with a clean bill of health, physical, intellectual, and moral, the traditionary three courses are open to the embryo schoolmaster. Circumstances permitting, he can enter a training college—which is far and away the best plan. He may commence at once, either under tutors or by self-instruction, to work up for the Governmental certificate examination. Or, he may accept a situation, within certain well-defined limits, as assistant-master. Let us deal with the first and last of these possibilities at more length; the second speaks for itself.

The gates of the training colleges subsidised by Government grants are kept by what is known as the Scholarship Examination. A fifth-year pupil-teacher who wishes to sit it, communicates his desire to the authorities of the particular college he intends—if successful—to enter. These authorities make arrangements purely on their own responsibility. If he is an early applicant, room will perhaps be found for the candidate to undergo his trial within their own walls. Should exigencies of space forbid this, he may sit at some officially arranged local centre. This examination takes place annually, on the first Wednesday after the 2nd of July. It is a wide one, covering the whole ground of the subjects previously required in the career of the pupil-teacher. Papers are set in Arithmetic, in Euclid, Algebra, and Mensuration, in Geography and History, Grammar, Dictation, and Penmanship, Music, School-management, and Languages (optional), and, for girls, in Domestic Economy, &c.

Those who pass are placed in three categories and numbered, in order of merit. The several colleges naturally fill up their vacancies from those students who stand highest on the list. As year by year there is an immense preponderance of supply over demand, it follows that very many nominally successful aspirants are left out in the cold; some to wait twelve months, and then sit again; some to fall into one or other of the two classes we mentioned besides. Amongst the chief training institutions something very like rivalry exists as to which of their number shall obtain the "top man," *i.e.*, the candidate who heads the official list. The term "Queen's Scholar" is scarcely a misnomer, for H.M.'s Treasury places to the credit of a college, a grant of £100 for every master, and of £70 for every mistress who properly completes the term of two years' training thereat.

This fact hampers the after-movements of a college-taught master in a rather important way too. It closes against him choice posts in the Civil Service, for which he might be inclined to fit himself, *until he shall have refunded to the Government the amount expended on his behalf.* Needless to say, not always a condition easy to fulfil.

Training colleges do not simply work on theory. To each is attached a practising school, wherein the students teach in turns, and show to their superiors the stuff they are made of.

In the colleges, again, there are two examinations: one at the end of the first year, and one, for certificates, at the end of the second.

A candidate placed in the third class at the scholarship competition is in no case eligible that year for admission into college. He may decide to contest the matter again the next summer in hopes of a better result; or he may fall definitely into the ranks of the assistants, with whose *status* we have next to deal.

An ex-pupil-teacher, who is not in a position to pay the college fees and his own personal expenses during training, or who, from some inscrutable cause, shrinks from the discipline, may make the best terms he can with any school managers who require his services. He is considered equal in the school economy to two pupil-teachers. He has need of the Inspector's sanction, and also of certificates of good conduct from his managers and head-master. He will, of course, utilise his spare time by working up for his final, or certificate examination; and in due season, together with his contemporaries from the colleges, and from private study, will sit it.

The climax of these long years of arduous preparation is now at hand. And here, to the outsider—still more to the interested schoolmaster—seems to exist a little injustice to the college-trained competitor. The latter stands or falls by the papers of the second year—very much more difficult ones than those of the first. The self-tutored assistant can take which set he pleases. As a matter of fact (natural selection) he usually chooses the easiest. A person who has neither been articled as a pupil-teacher, nor passed through college, may also aim at a certificate, provided he (or she) has served with credit for at least twelve months in some inspected school.

The examination may fairly be called a stiff one. It is extended upon the lines of the scholarship ordeal

in some respects, but is far more exhaustive and thorough. A syllabus of the subjects may be obtained from the Education Department, Whitehall.

Failures from the colleges are so rare as to be practically unknown; but the wide ranks beyond supply every year a moderate percentage. The many times plucked and still sanguine biped is not quite unknown even to these examiners.

Certificates are divided into three classes. Those candidates who nominally pass in the first division receive a parchment of the second, which after ten years of approved service is revised by the Department and exchanged into a first. Certificates of the third class only entitle to the charge of infant and small schools. Certificates are granted, at first, conditionally. That is to say, after winning them by brain-labour, a further delay of two years' (more or less) probation is enforced. Then, if the Inspector has twice reported favourably at the same school, the precious and dearly-bought document duly arrives.

Such is the training of the elementary schoolmaster—the ordinary and simplest training, for in all this we have said not one word of those supplementary examinations, in the five branches required for the full drawing certificate, in sciences, &c., of which only the initiated can guess the entire meaning and burden.

The master's daily toil is quite what one might expect from so extended a novitiate. The tradesman and artisan, who think so often of the teacher as a man of infinite leisure, unhampered mind, permanent buoyancy of spirit, would recoil in dismay from a tithe of his anxiety and long hours of labour.

These are days of frequent "new codes;" and generally each issue of that formidable bundle of red tape brings a longer, more lugubrious groan from the old servant of the Department. His couch has ceased to be a bed of roses. Tedious mornings and afternoons spent in a cheerless apartment, from whose atmosphere the lungs of some hundred or so of healthy boys are every instant draining away the oxygen; extra hours devoted to the instruction of his subordinates (compulsory, according to the regulations); his own work of never-completed preparation; perhaps an evening school in addition. This is the dreary round, year in, year out. Is it any wonder that an aged schoolmaster is a rare phenomenon? that the fell scourge consumption makes sad havoc in the ranks of this profession?

The work of the elementary teacher is complicated in many districts by difficulties and annoyances by law established. In our ponderous educational system there are wheels within wheels. "Half-timers"—to use the technical slang—are one of these sources of trouble. By the Government rule, a lad fulfilling certain conditions may attend school half-days, and work in fields or factory for the remainder of his time. For the poorer classes of the community this is an admirable arrangement; and the privilege is made avail of largely. But for the teacher it creates inconvenience. The boys are hard to classify. They cannot be expected to make anything like the same rate of progress as their fellows of full hours. They contract, in too many instances, the idea that the manual labour outside the school-walls is the main thing, and the lessons within mere by-play. Hence, they develop a carelessness, indolence, and sometimes obstinacy, which are as gall and wormwood to a conscientious instructor's soul, and which must perforce be overborne if the school discipline is to be adequately maintained.

A word, in conclusion, with regard to the teacher's prospects. Many, enlisted in the service beyond retreat, would laugh the phrase to scorn, and say that he had none—of any worth. Certainly they cannot be painted just now in very roseate hues. The distinctive mark of the nineteenth century, a stern competition, is set on this calling, as on others. With the founding of school-boards all over the country, there arose a somewhat extensive demand for masters. But, once met, it is not possible that a crisis of such magnitude can recur. The ordinary vacancies must be depended upon. And almost in every school one, two, three, or more pupil-teachers are always in training—a little fact that is significant, and may teach its own moral.

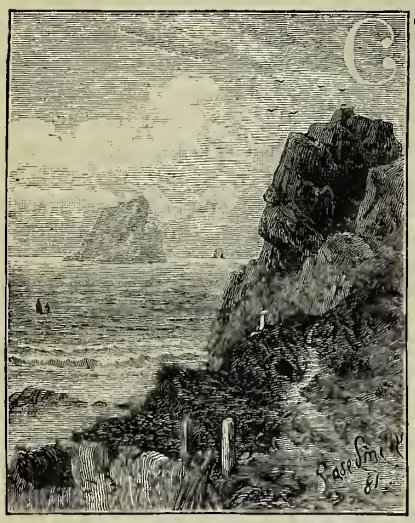
With schoolmistresses the case is somewhat different. Is not the marriage arena open to them? and do they not avail themselves of many a chance to retire with honours?

"A possible pension in old age," do you say? By the present code it is evident that the chance of a pension depends on the applicant having entered the profession before the 9th of May, 1862, and even then it is very small, a total of 270 (amounting to £6,500) only being granted. The Department seems neither to wish nor to expect very old schoolmasters.

An organisation remains to be mentioned that has done, is doing, and may be trusted to do, much towards the improvement of both the teacher's position and prospects. The National Union of Elementary Teachers was founded in 1870, to unite the body together for mutual defence and advantage. It is already, in the truest sense, a power in the land. Its objects, which include provident and annuity funds, an orphanage, &c., are such as commend themselves not only to the interested community, but to outsiders. Heartily we wish God-speed both to it and to every individual teacher.

W. J. L.

WALKS ABOUT DEVORAN.



THE MAN AND HIS MAN.

CORNWALL is a land of romance. Its rocky caves, its wild moorlands, the stormy ocean ever beating its ironbound coast, have in days gone by been the scene of many a legend. The shepherd still hears the horn of King Arthur sounding through the valley, and never shoots a raven, because by some metempsychosis the soul of the brave king is supposed to inhabit that ominous bird. We visit the ruins of the Castle of Tintagel, and picture the king and the Knights of the Round Table, assembled to recount their deeds of prowess or to whisper sweet tales of love to the ladies of Queen Guenever's court. In later days the blue lights of the wreckers have drawn many a vessel to destruction, and furnished sad stories told around the winter fireside. One superstition is still credited among the sailors; it is that the sea will always have its own dead again. Thus the old people refuse to bury the corpses cast up by the tide, and throw them back into their watery grave again, there to lie until the sea shall give up her dead.

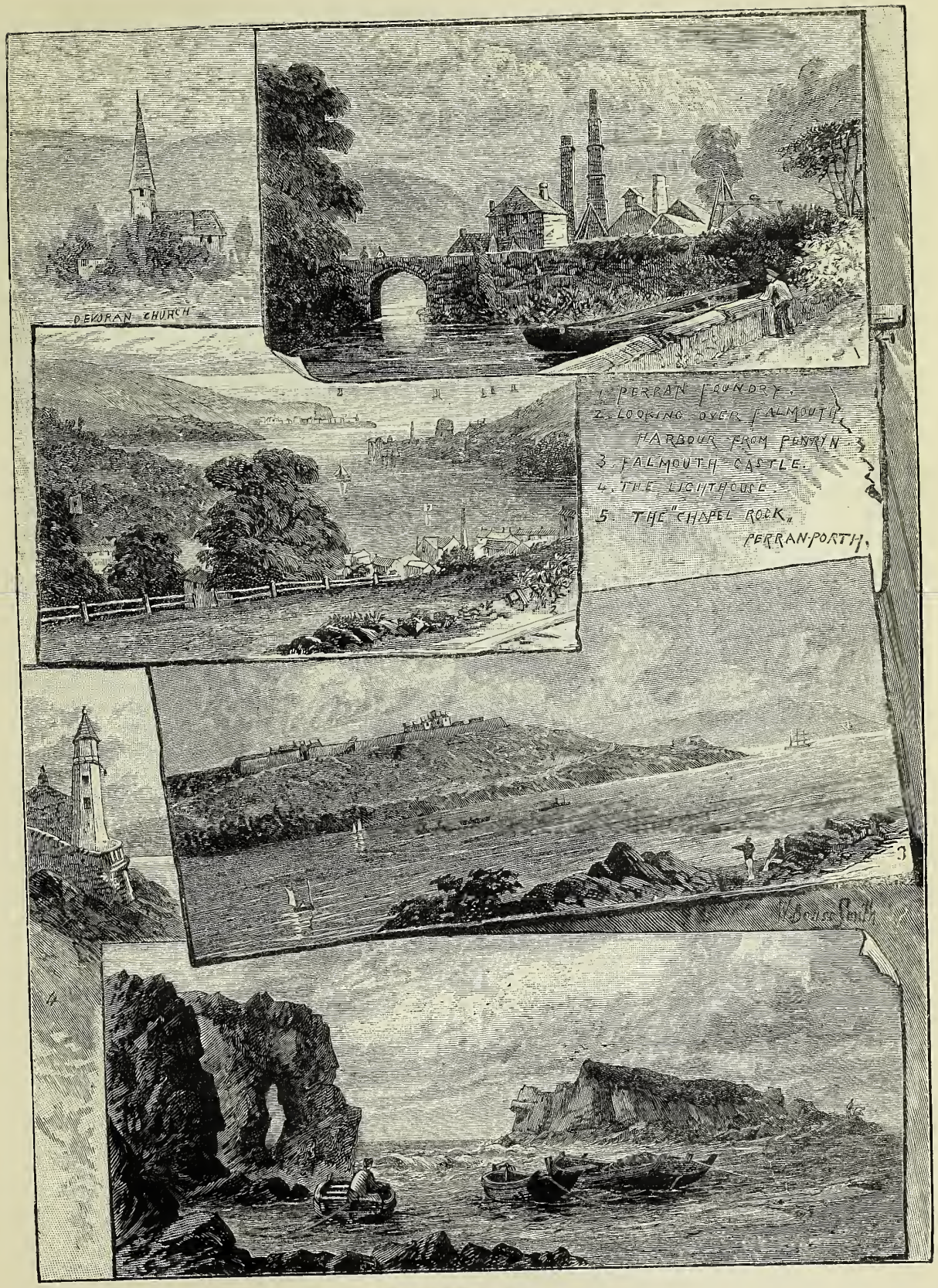
It was not among these wild shores that we took up our resting-place, but in a quiet inland nook, more resembling some parts of Devonshire in its features. A soft-flowing river, winding between hills covered with verdure and plantations, rustic bridges, old churches, and a clean well-kept village: such are the characteristics of the scenery near Devoran, which lies about five miles south of Truro. Far away in the distance, the eye rests on bare moors, studded with the towers which belong to the works at the mines, from which unhappily no smoke now issues, for almost all are disused. The price of tin has been so much reduced by its importation from abroad, that thousands of pounds which have been sunk in these districts will never be regained. The young men and maidens who once made the scene so lively are now dispersed, the former seeking their bread in the more favoured lands of California and Australia, where they succeed well in labour to which they are so well accustomed. Cornwall, once rich and thriving, is now comparatively depopulated and poor.

We start on a lovely autumn morning to explore the district between Devoran and Falmouth, a walk of about ten miles. On by the side of the river Fal, or Truro river as it is often called, we wander through lanes with high banks covered with ferns, wild flowers, and brambles. Often we stop to gather the blackberries, in spite of the Cornish belief which supposes them to be unwholesome after Michaelmas Day. Then it is—so superstition will have it—that the devil claims them as his own and puts his claw upon them, so that no good Christian will henceforth touch one. Half an hour's walk brings us to a beautiful dell, in which the little village of Perran-ar-Worthal lies embosomed in trees. A large but now ruinous foundry stands by the river-side, its buildings adding to the picturesque scene. We turn up a hill to the right to reach the church, dedicated to that wonderful St. Piran of whom we hear so much in Cornwall. Crossing over from Ireland on a mill-stone, he reached St. Ives somewhere about the fifth century, and began a ministry among the people which is remembered to this day. The miners, rough as they were in those days, were his especial care.

This church, dedicated to him, is so ancient that the date is unknown; the tower is in fine preservation, but the ground has risen so much around the nave that it is dug out in a trench to the depth of four or five feet. It is intended to restore it, but it is much more interesting in its present state. Its large churchyard rises up the hill and commands a fine view of the woods of Carclew. We stop to drink of the little well of St. Piran which gushes out of the rock, and then cross the ivy-covered bridge to the park of Colonel Tremayne, Carclew, or the "Grey Rock." Here we enjoy the perfection of English park scenery. Groups of fine timber are planted near the steep carriage-drive, among which herds of deer look shyly at us, while rabbits and hares dart away at our approach. Gaining the crest of the hill where the house is built, we look down upon the winding river and the cottages of Devoran below. The gardens are especially interesting, having been laid out in a sheltered valley, and planted with the rarest exotics by the late owner, Sir Charles Lemon. The warm climate permits the camellia to flower, besides the rhododendron of the Himalayas, with Mexican and Indian pines.

Leaving these cultivated beauties we press on to Penryn, a pretty, small town, where a more useful species of horticulture succeeds. Whole fields are here planted with the cauliflower brocoli, which gives a bluish-green tinge to the landscape. More than twenty pounds an acre is a common rent for such land, and the owners in good seasons sometimes clear a hundred a year profit. Even when all the railways were blocked with snow, in January, 1881, a telegram arrived to send a special train of cauliflowers to London, as the City was without its favourite winter vegetable and it must be obtained at any price.

And now we descend on Falmouth with its incomparable harbour, where the fleet of all England might



WALKS ABOUT DEVORAN.

find shelter from the storm. Pendennis Castle juts out into the sea on its fine promontory, a strong fortress which bore the brunt of the Parliamentary forces in 1646. The streets of the old town are curiously picturesque: narrow alleys, with projecting windows and porches over the doors, which delight an artist. Many a tourist would stigmatise them as dirty and mean, so they are in very truth, but not unlike the aspect of Flemish and old German towns. Let not the visitor neglect to see that wonderful collection of curios from all parts of the world, kept by John Burton, who employs the captains of the ships to bring him animals, birds, and articles of vertu.

Pleasant coasting steamers take you to various points around. We choose the one which sails up to Truro, by the river, which some compare to the Rhine. Here we pass St. Anthony's Head, projecting into the sea, where the lighthouse warns vessels from its dangerous reefs. Promontories and bays vary the lovely scene. The hills on the left are covered with dwarf oaks, bounding Tregothnan, the estate of Lord Falmouth, a splendid park through which you drive two miles to the hall. Here it was that the Prince and Princess of Wales were entertained when they laid the first stone of the Cathedral at Truro, a most successful festival, and one of which the Cornish people speak with much pride. We reach the dirty landing-place at Truro, a not very interesting town lying in a hollow. The masons were busy pulling down the old cathedral, a fine example of the time of Henry VII. Almost every stone on the outside was sculptured, and it is to be regretted that it was obliged to be cleared away for its successor.

Another long and pleasant ramble was to the opposite or northern coast, for Devoran lies about midway between the two shores. We passed over the bare moorland in a mist which happily cleared away as the finer scenery was reached. St. Agnes' Beacon rises grandly to our left; and, as if struck off from the mainland, are two remarkable rocks about two miles from the shore, called "The Man and his Man (a corruption of the Cornish word *mên*, a stone), forming conspicuous objects for miles down the coast. We heard much of Opie the painter, who was born at St. Agnes', during our sojourn in this neighbourhood. His paintings sell now at an enormous price, and fortunate are the possessors of them.

A remarkable amphitheatre leads us away from the road to Perran Porth. It is the most perfect specimen of the kind in England. Terraces rise round a high bank, centuries ago filled with thousands of spectators, standing to see the Miracle Plays which were once enacted here—curious representations of which some idea may be formed from the relic of the Ammergau Passion Play, which now attracts so many foreigners. Here we may imagine the crowd of tents pitched for the three days' performance, for no houses were near to shelter the audience: a singular gathering to enjoy what now seems to us, on reading the plays, a ludicrous and often painful travesty of sacred subjects. Since then Perran Round has been used for preaching by John Wesley and his followers, as well as for the favourite Cornish game of wrestling. We descend the steep hill to the Cove or Porth of Perran, a small watering-place not much developed as yet, but possessing a shore and scenery which would bring in a fortune to an enterprising speculator near London. The rocks stand like giants with the impetuous waves beating against them and lashing their foundations into a chaos of crags and chasms. Arches of every form are perforated through the rocks, and rocky islands, broken off as it were from the land, stand in the sea near the shore. Numberless sea-birds find their homes and build their nests in the cliffs, and it is not uncommon to see the seals with their young ones gambolling in the waves. The men shoot them from the rocks, and the tide washes the bodies on shore. We talked to one who was thus watching for his prey; he told us that the skin sold for about thirty shillings.

Scrambling over the sand-hills we discover, with some difficulty, the small remains of the very ancient church of Perranzabuloe. Here it is believed that the saint was buried. It was used for religious services until the sand, blown from the shore by the violence of the winds, buried it altogether in the ninth century. Again was a church built to commemorate the sacred spot, but in the course of centuries this also was desolated, the sand accumulating so rapidly that the porch disappeared in a single night. In 1835 the tradition of the first edifice was confirmed by the sands shifting and the long-lost edifice, with its little baptistry, standing out perfect as on the day when they were overwhelmed. Unfortunately parts of it have been carried away, and very little of the original building remains. A solitary cross pierced with holes stands near, and the sand seems as if it would soon cover what it once disclosed, leaving a dreary scene of desolation.

A pleasant walk from Devoran are the little village and church of St. Feock, lying in a creek opening into the Truro river. The church is one of those peculiar to Cornwall, having no tower, but a campanile on a hill not far off. There are but six in the county, and they are always built in a deep valley. The churchyard rises on all sides steeply round St. Feock, and the village stands on the heights above. The church itself has been lately pulled down and entirely rebuilt, but there still remains outside the porch one of the ancient crosses which are so interesting to the antiquarian. This is about four feet in height, with a sculptured figure, much worn away, carved upon the granite, and is probably a thousand years old. Some that we saw were placed at the roadside and much smaller, a Greek cross in form and pierced with four holes. They may have been intended to direct the worshipper to some neighbouring church. The churches generally are not distinguished for architectural beauty; they are what are called "barn-roofed"—one, three, or even five low ridges in the form of a parallelogram; rarely do they possess transepts or chancel. Solid granite towers seem formed to defy the rage of the elements, and the appearance of

most of them bears testimony to the stormy character of the country, and the wild unsheltered spots where many of them are situated.

We must in conclusion say a word or two in praise of the Cornish people. It is a pleasure to look at the handsome features of both the men and women, and their courtesy is great to every stranger. As we met on the road there was the ready "Good morning;" and if a trace in our carriage broke, the carter who first passed jumped off his vehicle to assist, and offer his knife or string to repair the damage. The women about the mines look remarkably well in their unvarying costume of a dark dress, large white apron nearly covering it, and a white calico sun-bonnet.

"KEEP YOUR OWN SIDE OF THE WAY."

NOW then, stupid, why don't you look before you? Do you want to send me into the gutter? Why don't you keep your own side of the way?"

These words, uttered in a shrill voice, of one who seemed to think he was aggrieved, were accompanied by a poke of a very unyielding substance, delivered right into my back, which sent me reeling, not into the gutter, but in the opposite direction, till I found myself stopped against the doorway of a shop in the lower end of Fleet Street. I shook myself, and looked up at my assailant—a boy with a long, heavy parcel on his shoulder, which he had tilted right against me. To my angry remonstrance he replied with a chuckle—

"Served you right, guv'nor; why didn't you keep your own side of the way?" And then he procceded on *his* way triumphantly, and was soon lost to my sight in the crowded thoroughfare.

"Served me right," I repeated to myself. "Well, maybe so. That's what comes of my unfortunate habit of walking with my eyes down and my brains wool-gathering."

Keeping a sharp look-out against any more *colliders*, as the Americans say, I turned down Blackfriars Street, and without further accident reached the Embankment. Depositing myself upon a seat, I began to meditate, not upon a *trifle*, on this occasion, for my chest was still aching from the blow of the sturdy errand-boy, but upon the maxim which he had enforced on my attention with such *striking* emphasis, "Keep your own side of the way." This text set me a-sermonising, and I forthwith proceeded to run this wise law up to its origin. Why should I keep my own side of the way? thought I, or rather, is not every side of the way my own? Don't I pay my full rates, taxes, and assessments to the Metropolitan Board of Works, and to all other bodies corporate? and do I not therefore help to keep in repair the entire length and breadth of the whole street, and every side of the way? Well, but that fellow who pitched into me in Fleet Street (or his master) might say the same; and if so, though I might on principle have been in the right, for the same reason he was not in the wrong, and our conflicting rights were decided by weight of metal, and I, the weakest, went to the wall.

It is plain that such a condition of things could never be maintained in a state of society like that which we live in, or every man would be knocking his head against every other man; and so, if there would not be "wigs on the green" every hour of the day, there would be hats on the highway.

In primitive times, and sparsely populated districts man paid little attention to these matters, and the noble savage walked where and as he liked. But when the world became more civilised, and population more dense, rights became more complicated and demanded more attention, and so each man had to sacrifice a portion of his original individual liberty and right for the common good, or, in the words of the legal maxim, to use his own rights so that he should not invade the rights of another. And so, after all, thought I, the fellow with the heavy parcel was not so much to blame when he knocked me over when I was in his way; and his proposition was as sound as his enforcement of it was impressive: "Guv'nor, why don't you keep your own side of the way?"

A pleasant anecdote is told of the learned and eccentric Serjeant Hill, who flourished before the time of the present generation, which I think is very much in point. Driving a friend one day in his gig in the suburbs of London, they saw coming down against them a heavy wain on the same side of the road. When the vehicles were rather dangerously near each other, his friend called out to the serjeant in great alarm—

"For goodness sake, serjeant, cross over to the other side, or we shall surely be run over!"

The serjeant, however, would not recognise what was common sense in opposition to what was common law, so whipping up his horse, he answered with cheerful confidence—

"Don't be alarmed, my dear fellow, the law is with us. We are on the right side of the road."

Happily, his friend took the common-sense view of the emergency. He shouted to the stupid waggoner, who got his lumbering wain out of the way just in time to let the serjeant triumphantly vindicate his legal right without broken bones or a demolished vehicle, to be followed up by an action for damages.

Even this obligation to keep your own side of the way, and your consequent right to keep it, cannot always be enjoyed in its full extent. Another concession to the exigencies of civilisation and the rights of others. In crowded cities like London this privilege is occasionally suspended for the public convenience. At the thronged crossings of many of the great intersecting thoroughfares, such as at

the Mansion House, Cheapside, Farringdon, Piccadilly and Oxford Circuses, and many others, the policeman inexorable and omnipotent stands, an irresistible power in the very centre of the rushing cross-current of traffic, and with uplifted hand stays you even in the prosecution of your right of going on your own side of the way, till the dammed-up tide at right angles is suffered to rush across, to be in its turn restrained for your convenience. And so the flood of traffic goes on, even as the flood of life goes on, in perpetual compromises and perpetual concessions: an illustration of the utter dependence of man one upon the other for his convenience, his enjoyment—nay, for his very being.

But this law of social life, "Keep your own side of the way," whether it be on land or on water, is of larger application than concerns the highways of road or of river.

It is the embodiment and expression of a great principle both in moral and in physical progression—a principle without which our intercourse with our fellow-men could not be carried on even for a day, either safely or smoothly—the great principle of respect for the rights of others in everything—in property, in opinion, in feeling. In the great journeying of the world I must not invade the property of another while I occupy against all comers my own. In the great thoroughfares of thought, while I maintain my own opinions, I must allow others to do the same. If I fail to do this, I am certainly a dogmatist, possibly a bigot, and if of an over-zealous nature I may end in being a persecutor, whether it be in politics, in philosophy, or in religion. There is one consideration which should make us specially cautious and distrustful of ourselves in these matters, and that is, that in matters of speculation the road is not always so plainly marked out that I can be certain I am at the right side; and so let me be careful that I am not wandering from it into the wrong one. In matters of taste and feeling, too, every one has as good a right to maintain his own opinion as I have to maintain mine; and there is nothing which one resents more than disrespect of his judgment upon the subject of æsthetics, all the more that there are no canons of criticism by which I can prove that he who differs from me is in the wrong; no mathematical demonstration that I am in the right. The "quarrels of authors," the contentions of critics, the fightings of professors, furnish abundant proofs of the unhappy results of want of respect for the opinions of others, so humorously depicted by the master-hand of Scott in his inimitable descriptions of the philological and antiquarian battles between Monkbarns and Sir Arthur Wardour in "The Antiquary."

And above all, I must "keep my own side of the way" as regards the business and affairs of others. I have quite enough to do to mind my own, without crossing over the way to pry into my neighbour's life or occupations, whether in his profession or his family. There is no meaner or more contemptible, as there is scarcely a more mischievous or dangerous character than a busy-body, a gossip, or a pry—one who intrudes himself into your business affairs or domestic concerns, who gives you unasked-for advice, looks into your household economy, and busies himself with match-making for your children; who carries stories of you to others, and of others to you; who, under the guise of peace-making, sets you all by the ears, creating jealousies and heart-burnings and quarrels, and who all the while declares that he is actuated by the best motives—candour and truth, kindness and consideration, and a sincere desire to promote your welfare.

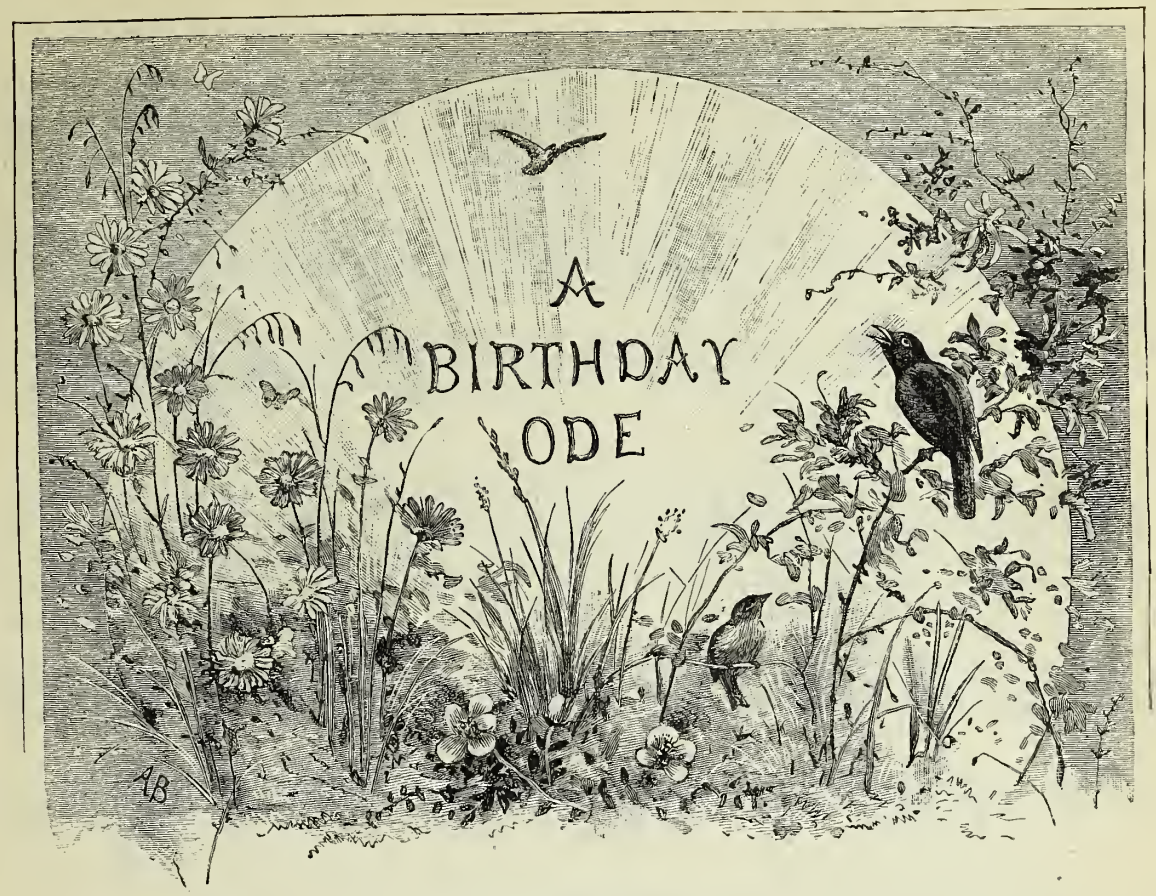
There is yet another class of persons, and they are very numerous, who, meaning no harm or unkindness, are often practically guilty of both—men who thoughtlessly and inadvertently are constantly blundering out of their own way and crossing over to the other, to the injury and inconvenience of their fellow-travellers through life, treading on the corns of one, digging another in the ribs, or touching the raw wound of a third, and all the time in happy unconsciousness of the pain they are inflicting. Such a fellow is my friend Jack Bowerman, who would not willingly hurt a fly, or wound the sensibilities of a donkey. The other day he asked Smith where his brother Tom was gone, forgetting that he had read a few days before that Tom had absconded with a large sum of trust-money.

My cogitations were suddenly brought to a close by a painful sensation in my lower extremities. I looked up and saw that a nursery-maid had driven the wheel of a perambulator across my feet, which I had thoughtlessly stretched far out into the gravel-walk, as I sank back in the seat during my musing. The girl was too much engrossed with "her young man" to be aware of what she had done, and there was nothing to be gained by scolding her.

"Served me right," thought I; "why didn't I keep my feet on my own side of the way?"

J. F. W.
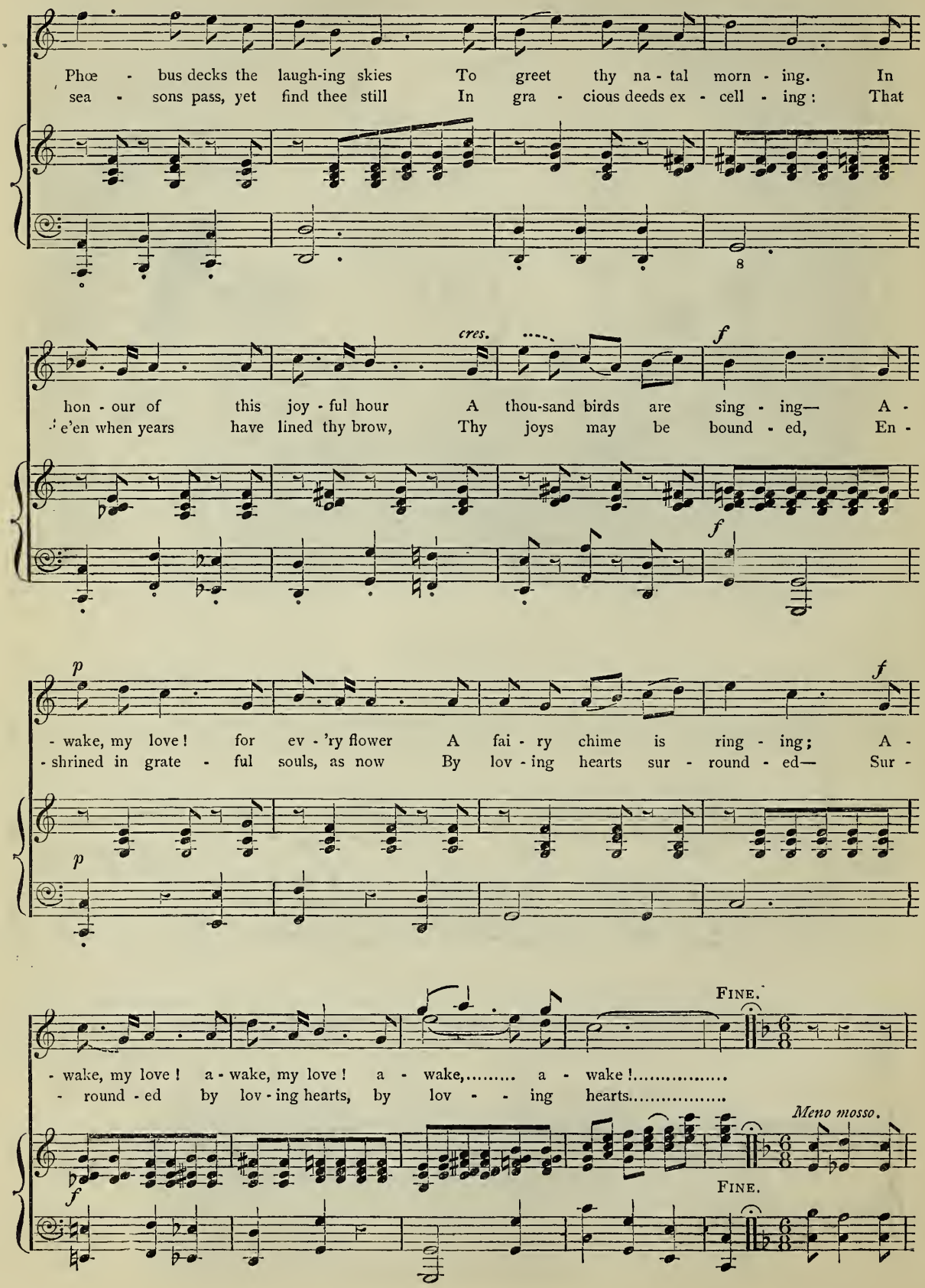




Words by FANNY FORRESTER. *Music by* J. GORDON SAUNDERS, Mus.D.

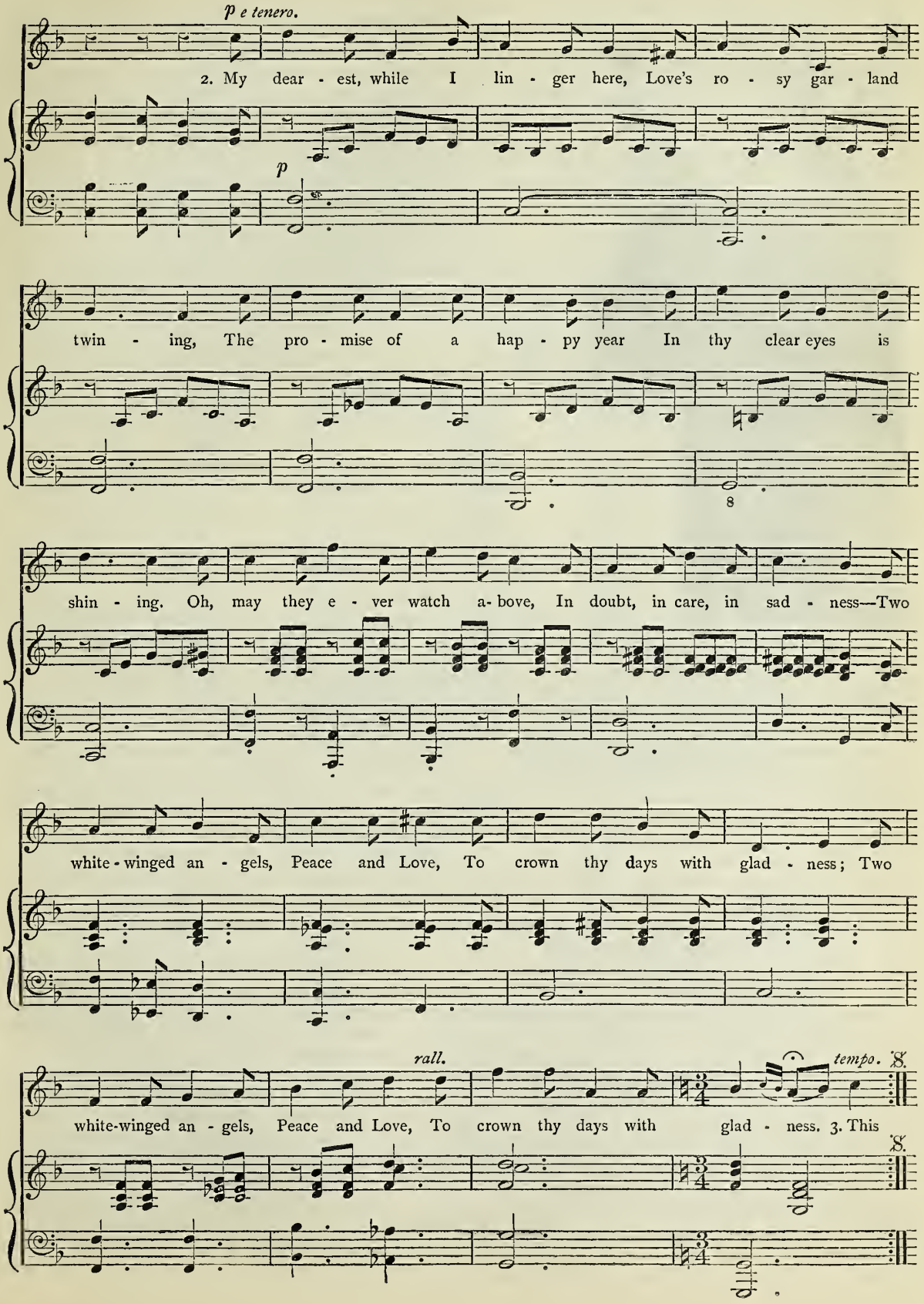
VOICE.

PIANO.

Tempo di Bolero.

1. Oh, la - dy mine! a - rise, a - rise! Night's sa - ble garments scorn - ing; Bright be my wish, through good and ill, In proud or low - ly dwell - ing: May


Phœ - bus decks the laugh-ing skies To greet thy na - tal morn - ing. In
sea - sons pass, yet find thee still In gra - cious deeds ex - cell - ing: That
8
cres.
f
hon - our of this joy - ful hour A thou-sand birds are sing - ing— A -
e'en when years have lined thy brow, Thy joys may be bound - ed, En -
f
p
f
- wake, my love! for ev - 'ry flower A fai - ry chime is ring - ing; A -
- shrined in grate - ful souls, as now By lov - ing hearts sur - round - ed— Sur -
p
FINE.
- wake, my love! a - wake, my love! a - wake,..... a - wake!.....
- round - ed by lov - ing hearts, by lov - - ing hearts.....
Meno mosso.
f
FINE.


p e tenero.
2. My dear - est, while I lin - ger here, Love's ro - sy gar - land
p
twin - ing, The pro - mise of a hap - py year In thy clear eyes is
8
shin - ing. Oh, may they e - ver watch a - bove, In doubt, in care, in sad - ness—Two
white - winged an - gels, Peace and Love, To crown thy days with glad - ness; Two
rall.
tempo.
white-winged an - gels, Peace and Love, To crown thy days with glad - ness. 3. This

LONDON FIRES AND FIREMEN.



THE London (Metropolitan) Fire Brigade may be said to have first had official existence on the 1st of January, 1833, when the various brigades of the principal insurance companies were amalgamated and placed under one management. These private brigades had been formed, of course, mainly to protect the interests of the various companies, by the extinguishing of fires on, or threatening, property insured by them—and supplemented the parochial fire-engines (rather over 300 in number), it having been the duty of the overseers and churchwardens of each parish, under an Act passed in the 14th year of George III., to maintain at least one engine for the extinguishment of fires. The staffs of these various parochial engines and insurance companies had hitherto acted each upon its own method and on its own responsibility, and it being seen that such a state of affairs could not last, eight of the principal companies proceeded, at the date we have named, to amalgamate those under their own control. Mr. James Braidwood, at that time the Director of the Edinburgh Fire Engines, was placed in command, and continued the Chief of the Companies' Brigade until 1861, when he lost his life at the great fire in Tooley Street on the 22nd of June in that year.

The duty of the Fire Brigade, at that time, was only to extinguish fires and to save property, and consequently to prevent loss to the insurance companies. The duty of saving life was undertaken by a society constituted in 1836, under the title of the "Royal Society for the Protection of Life from Fire." In 1843 this society had six escape stations in the Metropolis, and by 1866 had as many as eighty-five.

It may be of interest here to note that the first record of a fire-engine is that of one used in Nuremberg in 1657, and described by Caspar Schott. It required twenty-eight men to work it, and is said to have thrown a jet of water one inch in diameter to a height of eighty feet. The first steam fire-engine of any description was used at a fire at the Argyle Rooms on the 5th of February, 1830; and the first record of the invention of a fire-escape is found in a patent granted in 1766 to one David Marie.

While the duties of the amalgamated brigades of the companies were efficiently performed, the same cannot be said of those undertaken by the parish engines (with the exception of those of Hackney, Islington, Whitechapel, and perhaps a few other parishes). The parish engines were, as a rule, under the charge of the parish beadles, who often neither understood the mechanism of the engines nor kept them in order; and indeed at times women were in command of these parish brigades. Dissatisfaction was not unnaturally felt at such a state of affairs, and at the want of a central authority; and as the outcome of an agitation to place all the then existing brigades under public control, an Act was passed on the 5th of July, 1865, for taking, as from the 1st of January, 1866, the stations, fire-engines, and plant of the Metropolitan parishes, and of the Insurance Brigade, under the charge of the Metropolitan Board of Works.

The funds for the maintenance of the stations, men, and appliances were, under that Act, provided for by the levying of a yearly contribution from the insurance companies of £35 for each £1,000,000 they may insure on property within the Metropolitan area (in consideration of the taking over of the expenses, &c., of their Brigade), by a yearly rate of ½d. in the £1 on the annual value of property rateable for the relief of the poor, by a yearly grant of £10,000 from Her Majesty's Treasury, by various fines (for instance, a penalty not exceeding £1 from any householder whose chimney may be found to be on fire), and by charges for any fires that may be extinguished by the Brigade outside the Metropolitan area.

On the 1st of July, 1867, after the Brigade had been eighteen months in the hands of the Metropolitan Board of Works, the staff and appliances of the Royal Society for the Protection of Life from Fire were also taken over.

At the present moment, the staff of the Brigade consists of a chief officer (Captain Shaw, C.B.), four superintendents, about sixty engineers, 420 firemen, and 68 coachmen and watermen. There are fifty-two fixed, five movable, and four floating stations; some 150 fire-engines of various sizes, 135 escapes and scaling-ladders, and about 170 miles of telegraph lines. In the past year (1880) rather over 21,000,000 gallons of water were used in extinguishing 1871 fires; and out of 160 persons whose lives were endangered by fire, 127 were absolutely saved, and fourteen more persons taken out alive, though they died afterwards.

On the occurrence of a fire, the power of the officer in charge of the Brigade is very large indeed; in fact, his judgment and will override those of all other



LONDON FIRES AND FIREMEN.

authorities. Subject only to the stipulation that he must do as little damage as possible, he may, to use the words of the Act, "take any measures that appear expedient for the protection of life and property, with power to break into, or take possession of, or pull down any premises for the purpose of putting an end to a fire." He may take command of any volunteer or private brigades he may find present at the fire, and may order to be removed "any persons who interfere by their presence with the operations of the Fire Brigade"—he may cause "the water to be shut off from the mains and pipes of any district, in order to give a greater supply and pressure" in the district where the fire may be, and the water company has no remedy for the stoppage of its operations; and generally all police constables are under his orders and have to assist him.

The duties of the Fire Brigade being only to extinguish fires and to save life, it was arranged during the negotiations for the taking over of the staff and appliances of the insurance companies that the latter should be allowed to establish a force for the saving of property, and permission was given for that purpose in the Act of 1865—it being also provided that the Brigade should aid such a force and hand over to its custody any property that might be saved. Accordingly in August, 1865, the Committee of the London Fire Offices (then representing twenty companies) determined to consider the establishment of a Salvage Corps for London.

At that time the only staff in existence for the salvage and protection of property in the case of fire was the Liverpool Salvage Corps, then under the command of Major Faulkner, and which had become noted for the efficient performance of its duties. Information was obtained with regard to the working of this corps, and in December, 1865, the establishment of the London Salvage Corps was determined upon. Mr. W. Swanton, who for the last seventeen years of Mr. Braidwood's life had been his confidential assistant, and who was then the chief officer of the western district of the Fire Brigade, was selected as chief of the new body, and before the actual formation of the Salvage Corps was sent to Liverpool to study the organisation of the staff there. Though this corps was noted for the work it had done, the London Salvage Corps so improved upon its model, that soon after the Liverpool staff was reorganised and placed under the charge of the officer then second in command in London. Other Salvage Corps have since then been formed upon the London model, that of Glasgow also taking its chief from the parent establishment.

In addition to saving property at the time of fire, the Salvage Corps takes charge of the premises and goods until handed over to the custody of the owner (or otherwise disposed of), and assists to arrange the rescued property with the view of its sale or valuation, &c. It also has a staff for periodically visiting and inspecting the wharfs and larger warehouses of the Metropolis (on behalf of the Associated Fire Insurance Companies) with the view of suggesting methods and appliances for their better protection against fire, and its permanent staff at the present time consists of over seventy officers and men.

Considering the somewhat conflicting nature of the duties at times carried on by the two bodies, it speaks much for the management of both the Fire Brigade and the Salvage Corps that since their establishment there has not been a single case of police or other interference between the men of the different staffs—both corps having always worked harmoniously together. When we consider, too, the magnitude of the interests at stake (the value of the property insured within the Metropolitan area amounted in 1880 to over £613,000,000, and the rateable value of house-property within the district is now over £27,000,000 per annum), that the protection of all this property, and the persons of its owners, from fire, is the duty of these two bodies, we can readily appreciate their importance to the Metropolis and understand the enthusiasm with which their efforts are always greeted.

W. J. W.

THE LADY ROSALIE.

THE wind crept softly over the sea,
With stealthy tread, so treacherously,
And its steps gleamed white
In the shimmering light
Of the silver moon;
And the sea was crooning a lullaby
Of a maiden bright,
Fair to the sight
As a sunny noon:
"O sweetest of sweet maidens she!
Sweet is the Lady Rosalie!

"Each night she comes and stands by me,
And tells me all her misery,
With questioning eyes,
And 'plaining cries
Like caged bird's song:
'O sea, sea, sea! O cruel sea!
Bring him to me!
Why tarries he
So long, so long?'
O saddest of sad maidens she!
Sad is the Lady Rosalie!



"AND THE SEA WAS CROONING A LULLABY."

"*THE LADY ROSALIE*" (*p.* 662).

"And now she sleeps upon the strand,
Her fair head pillowed on the sand,
And in her ear
I whisper clear:
'Your lover's true!
From other clime and other land,
Across the track
I bring him back
To love and you!'
O gladdest of glad maidens she!
Glad is the Lady Rosalie!"

II.

The wind strode fiercely over the sea,
With mighty tread, so cruelly!
And, tempest-tossed,
A ship was lost
Beneath the wave.
Then he laughed aloud in savage glee:
"O pitying sea,
Where now is he
Whom you would save?
Saddest of maidens will she be!
Your own fair Lady Rosalie!"

III.

The morn is bright, and by the sea
One walks with Lady Rosalie;
And in her eyes
The love-light lies,
And glad her song:
"O kindly sea, so dear to me,
Since you have brought
Him whom I sought
So long, so long!"
O gladdest of glad maidens she!
The happy Lady Rosalie!

G. WEATHERLY.

SOME DOUBTFUL ACQUAINTANCES.

A SEA-SIDE STORY.



"IT is very remarkable," said my uncle as Mr. Gregory left the room.

"It is very mysterious," said Lily, with strong emphasis on the adverb.

"To me," observed an elderly lady boarder, "it appears to be something worse than mysterious; and without making any assertions, I would at least caution you, my dear, against any closer intimacy with one who seems so often to be possessed of information in a manner of which there is no conceivable natural explanation."

"It reminds me most," said the Rev. Mr. Briggs, "of certain cases, undoubtedly well authenticated, in which the existence of the so-called 'second sight' has been demonstrated in a very singular manner."

"And," added my uncle, "although many of the professors of spiritualism have been proved impostors, it by no means follows that all——"

"Yes, yes," broke in our lady friend, "but we all know that people once had dealings with familiar spirits, and I never could find any proof that this kind of thing has ever ceased, and therefore, as I said before, I very strongly caution you——"

"Hush!" cried several voices, "here he comes."

My uncle, my cousin Lily, and I were staying at a boarding-house at the sea-side, and amongst a somewhat numerous company was a certain Mr. Gregory. We had made his acquaintance on the night of our arrival in a rather comical manner. He was passing our room just as Lily was calling to me in a tone of woeful despair that she had broken the key in the lock and could not get out. Through the key-hole he had volunteered his services as an amateur lock-picker, and released us from our imprisonment.

This introduction had served quite as well as a much more formal one would have done to inaugurate what promised to be a pleasant sea-side acquaintance. Now on first sight he certainly presented very little appearance of being a suspicious or dangerous character. He was a young man of some twenty-five years of age, with a bright frank expression and a gleam of mischief in his eyes. He was exceedingly intelligent and well informed, and though rather retiring in the mixed company of our establishment, could, we discovered, sing well, read well, and talk well. Without intruding himself upon us, he had made himself very agreeable to us two girls; and we had surmised that he was a young professional man suffering from over-work, who had come down to recruit his health. But we are often warned against judging from appearances, and he had during the past few days manifested a very remarkable power of clairvoyance or second sight, or whatever else you like to call it, which had created a great sensation amongst us.

On the previous day, for instance, my uncle had met a gentleman at the station and had brought him home to dinner. We saw them walking slowly up the garden together in conversation, and Lily had exclaimed, "Who on earth is this?"

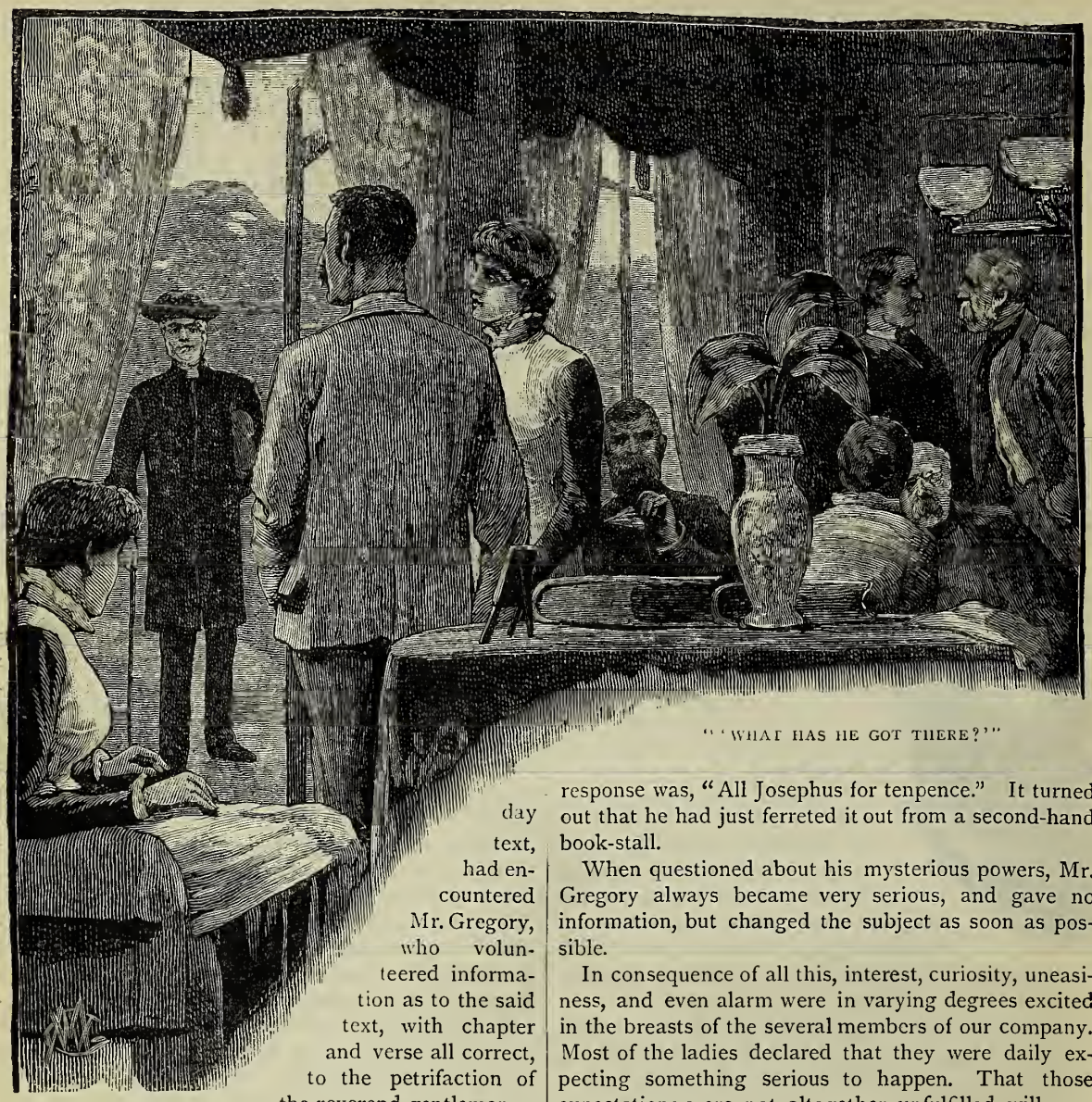
Mr. Gregory looked and said, "His name is Smith, and he is returning to town by the midnight train."

"You know him?" I said.

"Never saw him in my life before," was the answer.

Sure enough his name proved to be Smith, and he returned to town that night after a long private interview with my uncle; nor had he, he told us in answer to our inquiries, ever seen or heard of Mr. Gregory before.

On Saturday morning also the Rev. Mr. Briggs, taking a walk on the beach, meditating on his Sun-



"'WHAT HAS HE GOT THERE?'"

day text, had encountered Mr. Gregory, who volunteered information as to the said text, with chapter and verse all correct, to the petrifaction of the reverend gentleman.

On another occasion, when our elderly lady friend mentioned that she had been out making a small purchase, Mr. Gregory informed us *sotto voce* that a bottle of hair-wash constituted the purchase in question. This communication was very unfortunately over-heard. Its correctness was not at the time definitely established, but it was shortly after this that she first propounded her own particular theory on the subject, which she put forward with renewed confidence in the conversation given above, after a fresh display of the unholy phenomenon as she called it. This was the occasion thereof. Mr. Briggs had been seen coming up the walk in great glee with a parcel under his arm. "What has he got there?" said some one.

"All the works of Josephus for tenpence," replied Mr. Gregory. Immediately afterwards Mr. Briggs entered the room and said to the company, "What do you think I have just bought?" to which the general response was, "All Josephus for tenpence." It turned out that he had just ferreted it out from a second-hand book-stall.

When questioned about his mysterious powers, Mr. Gregory always became very serious, and gave no information, but changed the subject as soon as possible.

In consequence of all this, interest, curiosity, uneasiness, and even alarm were in varying degrees excited in the breasts of the several members of our company. Most of the ladies declared that they were daily expecting something serious to happen. That those expectations were not altogether unfulfilled will now be made plain.

There were two new arrivals on the day on which our story opens. Our company had hitherto been pleasant and select, but the lady and gentleman who now came amongst us, and who were named Mr. and Mrs. Grice, were exceptions to this. Showily dressed and loud in their conversation, they made great efforts to mix with ease in our company, and for some inscrutable reason seemed to make special endeavours to become intimate with our own party; Mr. Grice attacking my uncle, and his wife devoting herself to us.

We were at no pains to conceal our aversion to their ill-mannered and offensive intrusion, but they seemed determined to accept no rebuff. Lily said that we had met here the most pleasant and the most unpleasant persons whom we had ever seen in our travels. The former class, I presume, mainly embraced Mr. Gregory.

Ever since Mr. Smith's visit on the previous day, my uncle had seemed to be unusually worried and anxious. Something had happened at the office, it appeared, which caused him very great uneasiness, and he kept a constant watch for the post. Lily and I were troubled about it, but were hardly prepared for his sudden announcement at lunch the next day, upon receiving a letter from town, that we must pack up at once and return by the first morning train.

We had no objection to escape from the Grices, but in spite of Mr. Gregory's ill-repute for his mysterious arts, we were very sorry to leave him, to say nothing of the abrupt and unexpected termination of our holiday.

The Grices were sitting next to us when my uncle made this announcement, and I saw a peculiar look of significance pass between them. Mr. Gregory was sitting at the other end of a long dining-table, and quite out of earshot, but he came up immediately after we rose from the table, and said—

"A very sad thing, this sudden departure of yours!"

"Mr. Gregory," I replied, "you are perhaps aware that you are under grave suspicions of being in league with the powers of darkness, and this is another proof. How could you possibly know?"

"Oh, ill news travel fast," he said, laughing. "But it is a very hot afternoon, what do you say to a little reading?"

Lily here squeezed my arm vigorously, but I answered, "I fear my uncle will not let us go out of his sight. He feels it his duty to keep special guard over us while we are in such dangerous company."

"Never mind," he said, "I will read to him as well."

We were now in the corner of the drawing-room near a window looking out on to a covered balcony which overlooked the garden. My uncle came up and returned Mr. Gregory's courteous greeting in a manner which was, I fear, not very gracious.

"May I trouble you for the paper after you, sir?" he said.

"Certainly," was the answer. "But may we not all enjoy it together? With your permission I will read aloud to the company."

My uncle looked considerably astonished at this unusual proposal. Lily looked up with open eyes and curious expression, this being not exactly the kind of reading she had intended. But the offer was seriously made and repeated, and my uncle, who dearly liked being read to, gave a dubious consent.

Miss Lily, with filial affection, made him particularly comfortable in an arm-chair, and Mr. Gregory commenced reading a long prosy article on French politics. He read with anything but his usual spirit, and in a soft, low, monotonous voice. The consequence was (as had possibly been not wholly unforeseen) that my uncle was soon enjoying his accustomed afternoon siesta. The reading, having become gradually slower and softer, now ceased, and the reader, looking up, suggested by a slight



"A BOOK OF POETRY WAS QUICKLY PRODUCED" (p. 666).

gesture an adjournment to the garden. Lily and I tried to smother our laughter and look shocked, but we adopted the suggestion. A book of poetry was quickly produced, and I found that there is a difference between hearing French politics read in a stuffy drawing-room to a middle-aged gentleman, and hearing "Enoch Arden" read in a cool shady alcove, to a pretty, dark-eyed, lovable maiden, with tender bosom heaving in sympathy with poor Enoch's sorrows, especially when the reader is a handsome young bachelor, with an exquisitely modulated voice, able to do full justice to the harmonious numbers of the Laureate.

At the end of half an hour I was startled by an exclamation from Lily. Looking up, I saw in the garden below, sitting on a seat under the trees with their faces towards us, our dear friends Mr. and Mrs. Grice. The gentleman was keeping up apparently a desultory conversation with his wife. They waved their hands on catching our eye, and beckoned to us to come and join them, which we did not do.

Mr. Gregory, instead of going on with his reading, continued to regard them intently, and asked us whether we knew them. We said, "No."

"But they seem to know you," he said.

We explained how they had favoured us with their attentions. To our disappointment, he could not be induced to go on with his reading, but he continued to stare at the couple before us; and when at last they strolled off in different directions, he said that he must apologise for having an engagement, and he left us abruptly. "A strange young man, indeed!" we thought, and we were still more surprised when in about an hour he returned, and asked my uncle to be allowed a short private conversation with him. My uncle seemed startled at this request (and so, by the way, did Lily), but after a short pause he led the way into an adjoining apartment.

The conversation which ensued, as we subsequently learned, was as follows:—

"I am about, sir," said Mr. Gregory, "to refer to your private affairs to an extent which will surprise you, but I hope to be able to render you a service which will be an ample excuse for my intrusion. You are, I believe, returning to town to-morrow?"

"Yes."

"The cause of your return is, I believe, connected with the forgery of a certain cheque in your name."

"Sir, how can you possibly know that?"

"That cheque was brought to you for your inspection three days ago by one of the clerks from the bank, a Mr. Smith, and it is now in your possession."

My uncle was speechless.

"Hear me further. The accuracy of my statements hitherto may claim credence for what I am about to affirm. Unless I am greatly mistaken, there are now in this establishment two persons who have been employed to regain possession at all costs of that forged paper. They suspect that you have it, and already your room and your daughter and niece's room have been searched, and it only remains to search your person."

My uncle turned pale.

"It is known that you are leaving to-morrow morning, and the attempt will be made between now and then. Will you allow me to offer you my advice?"

I will not attempt to describe my respected uncle's condition of body and mind at this part of the interview, suffice it to say that the proffered advice was ultimately adopted.

On that evening my uncle declined to accompany us when, an hour after dinner, the house emptied on to the promenade. Mr. Gregory also was missing, and had not appeared at dinner. The Rev. Mr. Briggs took us under his care. My uncle was already nodding in his chair as we went out. Twenty minutes afterwards two of the company softly re-entered the room. This I had from an eye-witness. Their names were Mr. and Mrs. Grice. Mrs. Grice stood at the door, and her husband advanced gently across the floor to where my uncle lay back in his chair, snoring audibly, his handkerchief over his head, his coat thrown open, and a pocket-book just showing in his breast-pocket.

Mr. Grice crept up to him, abstracted the book with a practised hand, put it into his own pocket, and turned to go. Now, as he re-crossed the room he had to pass before a large lounge, with long hangings in front, and he was, perhaps, somewhat surprised to find his ankles seized in the firm grip of a pair of hands thrust out suddenly from under the lounge. As he fell, his amiable partner turned round—into the arms of a detective officer. At the same moment Mr. Gregory entered through the window from the balcony.

"This is your pocket-book, sir," said one of the detectives.

"Thank you," said my uncle. "It has nothing in it, but I am glad to have it back again."

Mr. and Mrs. Grice were removed at once to another public establishment in the neighbourhood, where the company was very select, the hours very regular, and the maintenance very cheap: a style of establishment which it was subsequently proved they had frequented in more than one part of the country.

Amidst considerable excitement we promenaded late that night. My uncle said, "You have rendered me a service, sir, which lays me under the deepest obligation to you. I have no doubt that the original delinquents, of whom these creatures are only the tools, will be brought to justice. Finding that we are on their track, they have made this effort to destroy the proof of their guilt, and prevent us from submitting it to experts. Thanks to you they have failed. I can only say how welcome will be any opportunity of making any return to you, however slight."

"I shall certainly take you at your word, sir," was the answer.

"And now, Mr. Gregory," continued my uncle, "will you pardon our curiosity if we beg you to tell us the means by which you were able to divine the intentions of our departed friends?"

"Oh, Mr. Gregory," cried Lily, "you must tell us. We are on thorns to know, and will do anything in the world you like to mention if you will tell us."

"On *those* terms I consent," said he with a curious

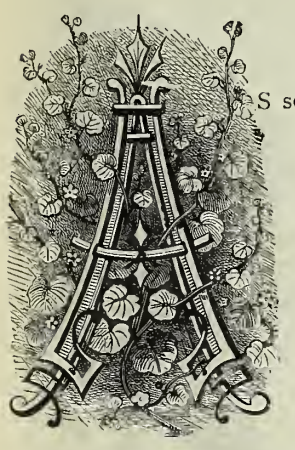
look at Lily, which made her suddenly blush very much, as I could see even in the moonlight.

"You may have noticed," began Mr. Gregory, "that I am somewhat deaf, and I have been much more so. In consequence of this I have acquired the art, which I believe almost any one can acquire, of reading the movements of the lips in the same way that the deaf-and-dumb are taught to do, so that I can always understand what people say if only they are within seeing distance; and my sight is very acute. I need hardly say that I avoid *over-seeing* conversation, if you will allow the expression, as much as I would *over-hearing* it; but I frequently *see* people speak a few words on accidentally glancing at them. I think that what has puzzled you will now be plain. Perhaps I ought to confess that I have yielded a little to the temptation of mystifying the company during the last week, especially in the case of Mr. Briggs, who has, like many people who have lived a good deal alone, a habit of talking to himself as he goes along, which he is scarcely aware of. This afternoon, however, I watched the Grices in good earnest. I was very much astonished at what I saw. Your sudden departure had disarranged their plans, and they had a full discussion of past and future operations. It was not at all a bad idea to hold their deliberations before your very eyes, so as to keep up their watch on your movements and disarm suspicion, but they had taken no precautions against being *over-seen*. The rest you know."

"But how about the purchase of the hair-wash, that sad proof of occult art?" I said.

"Oh, that had nothing to do with it. I was in the shop, being shaved, and I saw the transaction in a looking-glass."

Later still, when my uncle had gone in, I heard him quietly say, "So you will do whatever I like to mention?" But these words were not addressed to me, and I judged it best to fall into the rear, and having no gifts of clairvoyance myself, I cannot tell you the rest of the conversation. I can only add that our return was postponed, and that shortly after these events Mr. Gregory again requested a private conversation with my uncle; that he had again some revelations to make concerning a conspiracy of two, male and female in this case also; and that shortly after the first pair of conspirators had been "sentenced for life" by one of Her Majesty's Judges, a similar sentence was pronounced upon the other pair by the Rev. Mr. Briggs.



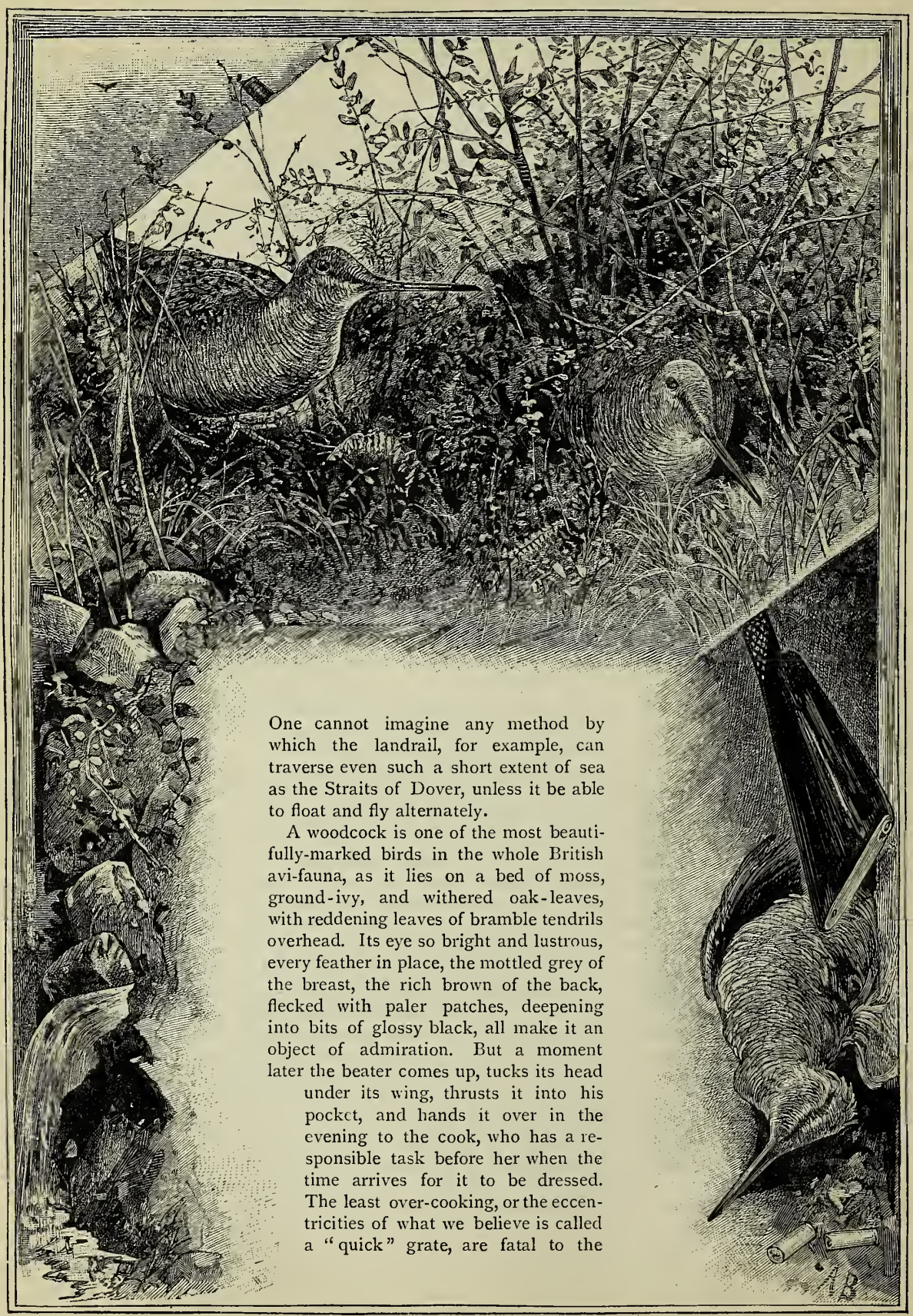
A FEW WORDS ABOUT WOODCOCKS.

"AS soon as a slave sets foot on English soil, he becomes free," was the dictum of Lord Mansfield. A legal axiom, this, which may apply to featherless bipeds, but certainly does not benefit those feathered ones whose name stands at the head of this paper; for from the moment when they first reach England till the fifteenth, if not the first of February, mercifully puts an end to their troubles, they suffer persecution—it being a difficult matter to mention any migratory birds which on all possible occasions are so unsparingly destroyed as is the case with woodcocks.

They arrive at a time when the remnants of once-strong coveys of partridges have joined together into parties, having off and on, since the first of September, gained sufficient experience in explosives to render them wary and shy. Pheasant-shooting has lately begun, but it is full early to enter the coverts, and pheasants may nowadays be regarded almost as domestic creatures. The greater part of them are reared under hens, so that a preserver of game cannot feel any great enthusiasm at killing "tame birds," which he has very likely watched in their babyhood under his coops. But the coming of the first woodcocks is quite a different matter. They are genuinely wild birds, and give the most difficult and uncertain of all sport. For in what manner a woodcock, when flushed, intends to fly, over what point in a hedge it means to flip, round what particular tree-trunk it has made up its mind to lunge, as it is flying off, apparently so guileless and ignorant of aëronautics—are things which no one can decide beforehand.

Whence come they? From Sweden and Norway, driven before the severity of an early winter, to seek less inclement quarters, where food is more abundant. The date of their arrival on our shores is determined by moon and wind. If the moon be full and the wind be easterly about the middle of October, the first flight may be timed to arrive almost to a day, but in any case the second and larger flight does not occur until the following full moon, in November. They would appear sometimes to overshoot the mark. Either because the wind is very strong, or because their flight is at too great an elevation to admit of their observing accurately where they are, or from some unknown cause, they are carried on to Scilly in large numbers, where they remain for a day or so to take rest, before leaving again as suddenly and unanimously as they came, to make their way back to the mainland, or perhaps across to Ireland.

Instances have been recorded of these birds being observed out at sea, resting on the water, presumably during their passage from one country to another. This may throw light on the manner in which little warblers, such as chiff-chaffs, who are seldom seen to fly further than just from one bush to another, yet come with spring and disappear with autumn in annual regularity, are enabled to cross the Channel.



One cannot imagine any method by which the landrail, for example, can traverse even such a short extent of sea as the Straits of Dover, unless it be able to float and fly alternately.

A woodcock is one of the most beautifully-marked birds in the whole British avi-fauna, as it lies on a bed of moss, ground-ivy, and withered oak-leaves, with reddening leaves of bramble tendrils overhead. Its eye so bright and lustrous, every feather in place, the mottled grey of the breast, the rich brown of the back, flecked with paler patches, deepening into bits of glossy black, all make it an object of admiration. But a moment later the beater comes up, tucks its head under its wing, thrusts it into his pocket, and hands it over in the evening to the cook, who has a responsible task before her when the time arrives for it to be dressed. The least over-cooking, or the eccentricities of what we believe is called a "quick" grate, are fatal to the

flesh of a bird which, to preserve its flavour, should be a trifle under-done rather than otherwise, and is no fit subject for cremation.

On first arriving they take shelter in open furzy commons, rivulet-watered ditches, and small copses. If, as is often the case, they are then thin from their recent long flight, they rapidly get into condition, and continue plump and tender (unless protracted frost should deprive them of sufficient food) until the end of January, at which time their flesh becomes less delicate, in consequence of their feeding upon frog's-spawn or some other coarse nutriment. As soon as the leaves are off the trees they enter the large woods, in which they remain till towards the end of the season, when they again prefer more open situations. They are sensitive and capricious creatures. A wood which to-day contains as many as twenty of them or more, may to-morrow, should the wind shift a point or two, be without one. They do not choose a spot, for the purpose of sleeping through the day, without being satisfied that it is warm for their feet, sheltered from the wind, shaded from the sun, and yet sufficiently free from undergrowth to enable them to move about, and easily rise. Also, it is freedom from intrusion into their haunts of human beings, cattle, and dogs, that they strive to obtain, rather than mere absence of noise. We have often flushed them in a valley under a railway viaduct, within stone's-throw of a boiler-yard, where the constant riveting of huge boilers produced a clatter that mingled with the falling waters of a rapid rocky stream, and drowned all sound of speech.

Recruited by the day-time sleep, all of them with one consent leave the covers at the approach of night. After the rooks and jackdaws have passed overhead in one long clamorous line towards the tall woods which form the assembling-place for all the communities of these birds for many miles round; after the sun has set, and before the evening star has made itself visible; when the weary labourer shoulders his tools, empty dinner-bag and can, and leaves his work; when the cock-pheasants are disputing for precedence before dozing, and the last lingering village boy, having reckoned up his after-school revenue in marbles, with thoughts of tea-time wends his whistling way; in that half-hour when light and darkness meet, and the quiet evening hush is over everything—then it is the woodcocks are seeking the moist meadows in which cattle have been feeding. If the evening be fine and calm, they generally fly low, in a leisurely, careless way, although they are wide awake and hungry, and might be expected to be in a hurry to reach their feeding-ground.

Then again, at the return of dawn, when the dull grey of the eastern sky is first tinged with the ruddy foretaste of sunrise, and the sheep-dog calls his master to go and feed the flock and fetch back the cows; when the blackbirds fly into the field, and finding it yet too soon to pick up the early worm, fly back once more to the hedge, to wait a while longer—then the long-bills are returning to the woods, flying rapidly and cautiously, and showing that they are on the alert and anxious to avoid danger. This is a curious peculiarity, sleepy and gorged as they must then be from their nocturnal banquet.

At the "roading"-time probably the same bird takes the same line evening after evening. Perhaps the reader may know that one or two usually at this time pass over his house, and may be desirous of enjoying the novelty of saying he has killed a woodcock in his own garden. In this case, his best plan will be to stand facing the horizon whence the birds are expected, at dusk, taking care to have a clear space behind him. Probably he will see a bat wobbling backwards and forwards, then a belated thrush will pass over, and then, when his patience is almost gone, and he is least looking out for it, a woodcock, looking in the uncertain light nearly as large as an owl, will appear above his head. It comes into view without any warning of approach, catches sight of its enemy, and before the latter has time to wheel round and prepare for action, it has given one long flip round a corner of the house-roof, or behind a tree, or comported itself in some other puzzling way such as to render a fair shot out of the question. The only encouragement, then, must come from the thought that a cock that's missed and flies away, will live to be shot at another day.

A. H. Malan, M.A.

HOW LOCOMOTION IS EFFECTED.

BY PROFESSOR W. STEADMAN ALDIS, M.A., COLLEGE OF SCIENCE, NEWCASTLE-UPON-TYNE.

A CORRESPONDENT has drawn my attention to a sentence in an article in Cassell's Family Magazine of July, on "The Search after Perpetual Motion," in which it is stated that when a horse draws a cart, the cart pulls the horse backward with just as much force as that with which the horse pulls the cart forward. My correspondent intimates a doubt as to whether, if this were true, the cart would make any progress, and more than insinuates that there must be some mistake somewhere.

The particular illustration of the general law of mechanics that action and reaction are equal and opposite, which excited the criticism of my correspondent, happens to be due to no less a person than Sir Isaac Newton. It may fairly therefore claim respectful consideration before being condemned as either foolish or untrue. No weight of authority ought, however, to cause us to receive a statement on a matter of science, unless its truth can be made manifest to our understandings after a fair examination, and even the evidence of a Newton will be invoked in vain in favour of a falsehood or an absurdity.

The difficulty expressed by one person may have been felt by others, and as some part, if not all, of the perplexity arises from loose notions on the nature and manner of action of the forces by which locomotion is produced, a careful consideration of these points may not be without interest.

The power of locomotion is one critical test which distinguishes the members of the animal world from vegetables. The noblest tree must stand where it is planted, and where it falls there must it lie. Its branches may wave in the wind and make sweet music to the evening breezes, but its roots are fixed and motionless. We go away for years from the scenes of our childhood, and returning, find the old familiar beech, with our initials carved on its bark, still standing where it did. The meanest and most feeble animal, the sea-star on the shore, the snail or the earth-worm in our garden, can move at will from place to place, by a process whose mechanical principle is in all cases the same. Man, the highest of animals, has not only the locomotive faculty common to the beasts, but has invented machines by which the power of motion is multiplied beyond the power of calculation. Metaphysicians say that the locomotive faculty is that which alone really makes us conscious of an actual world external to ourselves. Our senses, of sight and smell and hearing, only tell us of impressions produced on our minds, but the resistance offered by surrounding bodies to the motion of our limbs is the real evidence on which our belief in the existence of external matter, and our knowledge of its various forms, are based. We shall see that it is this very resistance, offered by matter to the motion of our bodies, which enables us to move at all, and farther that the amount of resistance offered to the motion of one part of our bodies exactly measures the amount of possible motion of the whole.

We have most of us at one time or other watched the movements of a caterpillar crawling on a leaf. Keeping its hinder end fixed on the leaf, we see it lift its head up, stretch itself out, and after settling in which direction it means to go, bend itself down to the leaf in front, and fixing its head, draw its hinder members up to it by a contraction or bending of the body. The head is again lifted from the leaf and the whole process repeated until the crawling creature has reached its destined end.

The method adopted by the caterpillar is really that which is employed by a man in walking, and even, in principle, that by which steam drives an express engine at the rate of sixty miles an hour along its iron way. In all cases motion is produced by an effort, on the part of the living or inanimate agent, which tends to draw two parts of the agent nearer to each other, or to push them farther apart. One of these portions is in contact with some external body by which its motion is prevented. The other portion must therefore move in consequence of the separation or concentration of the two. The next step is the reversal of this internal motion. The portion of the agent which was formerly fixed is now released, the other part placed in contact with the earth or some fixed object, and the second part of the machine or body is made to follow the first. This process can be repeated indefinitely, and, subject to the physical limitations of the agent, any amount of motion can be obtained.

In each step there are a variety of forces brought into play. There is first the internal action which tends to separate the two parts of the machine or agent. In a living agent this action consists of the expansion or contraction of muscles connecting the portions of the body, while in a steam-engine it is produced by the expansion or contraction of a mass of heated vapour. *In either case it obviously produces an equal pressure on the two parts*, which we will call A and B, A being the portion temporarily fixed. There is farther a mutual action between A and the ground, or other fixed obstacle. Since A is at rest, it follows that there must be as much force acting on it in one direction as in the opposite. Hence the resistance of the ground to A's motion must just equal the pressure exerted by the internal action of the body on A, and must therefore, in virtue of the sentence in italics, also equal the pressure produced by this internal action on B. The motion of B is thus produced by a force exactly equal to the resistance which the ground offers to the motion of A. The whole of the machine or body may, in fact, be regarded as simply a transmitter of the force exerted by the fixed obstacle on A, so as to produce motion in B.

The general principle may be illustrated by two or three special instances. Many of us have at one time or another enjoyed the luxury of being punted about on a summer evening in the shallow reaches of the Thames or the Cam. We have watched the energetic member of the party take a long pole, and resting one end of it on the bottom of the river, lean against the upper end, and push with all his force. The force with which the ground resists the slipping of the pole is transmitted, through the medium of the pole and the vigorous muscles of our friend, to the boat, which glides easily through the water. Before it has gone many feet the pole is lifted up, brought forward, and planted in a more advanced position, and the process is repeated until the boat has got to the desired shady pool or grassy bank. While the pole is being lifted and drawn forward, the action of the muscles is reversed from that exerted in pushing. The feet of the boatman during this part of the proceeding tend to push the boat backwards, in virtue of the fact that his arms pull the pole forward. The force required to lift the pole and bring it forward is, however, so much less than that exerted in pushing the boat in the first part of the action, that the boat's momentum is scarcely checked, and even if it be slightly reduced, the water acting on the square back of the boat prevents any sensible retrogression.

Another and even more familiar instance of locomotion is afforded by the process of walking. The resistance of the ground to the backward slipping of each foot in succession enables the internal action of the muscles of the body to throw the other foot forward. In skating the resistance is obtained by placing the fixed foot sideways to the direction in

which the other foot is desired to be moved, the edge of the skate, digging slightly into the ice, affording the needed support. In all these cases it is the resistance of some fixed obstacle to motion which is the necessary condition of motion, a seeming paradox, but like many other apparent paradoxes, a very important truth.

In modern days we have machines for the purpose of locomotion, by which long distances can be traversed in a time incredible to our forefathers. The locomotive steam-engine is still, whatever may be in store in the future, the most important of these. Its motion is produced by the expansive power of steam, which is allowed to enter into a cylinder in which works a piston. The steam, entering alternately at opposite ends of the cylinder, forces the piston in succession backwards and forwards, performing thus exactly a similar office to that fulfilled by the muscles of the body, when they separate and bring together the feet in walking. By means of a series of rods and levers, the motion of the piston is communicated to the driving wheel of the engine. The friction of the rail, on which this rests, prevents the point of the wheel which at each instant is lowest from moving, and consequently, as the wheel cannot slip, it must roll, and the engine moves forward. Here again it is the resistance which the rail offers to the sliding of the wheel, which really measures the possibility of the forward motion of the engine. The mechanics whose active brains busied themselves sixty or seventy years ago in the application of steam to locomotion were well aware of this fact. They were unable to believe that the mere friction of smooth iron would be sufficient for the purpose. One engineer proposed a machine with a pair of legs at the back, which acting in succession after the manner of punting-poles pushed the engine forward. Blenkinsop attempted to secure the same object by putting teeth round his driving wheel, and a rack for them to work in alongside of the rail. William Hedley, of Wylam, was the first man who proved by experiment that the smooth rail alone was sufficient for the purpose, and by this discovery rendered possible the inventions of Stephenson and others which have revolutionised the face of the world.

There is an old story that Archimedes, the great Greek mechanician, declared that, given a fulcrum, he could move the world. A fixed point or fulcrum is, as we have seen in all the instances that have come under consideration, necessary for motion in any case, and the greater the resistance which the fulcrum is capable of offering, the greater the motion that can be produced. The quality of the fulcrum is as important as the nature of the active powers which use it as a point of support. The best locomotive yet constructed fails and destroys itself, if the road be badly laid or imperfect, or if the engine leave the massive rails to plough along the gravel and sand.

We can now return with a clearer understanding to the question which started the discussion, the mutual action between a cart and the horse which draws it. We have seen that, as the horse walks, at each step a certain amount of muscular action is exerted, the intensity of which is measured by the horizontal pressure of the horse's feet on the ground. When a cart is attached, the horse is immediately sensible that it has to make a greater muscular effort at each step in order to keep moving at the same rate, and therefore must exert an equally greater pressure on the road. This increase of muscular action evidently measures the force by which the horse pulls the cart.

Let us represent the force of the internal muscular action when the horse is unyoked by A. This same quantity, A, also represents the forward pressure of the ground on the horse at each step, which we have seen exactly measures the force which drives the horse forward. Let B be the additional force of muscular action when the cart is attached ; B, therefore, measures the force by which the horse pulls the cart. The sum of A and B is therefore the forward pressure of the road on the loaded horse. The horse is now acted on by the backward pull of the cart, as well as this forward pressure of the road. The difference between the latter and the former is therefore the real effective force which urges the horse forward, and since the horse by our supposition goes as fast as before, this real effective force must be measured by A. The backward pull of the cart must thus reduce the sum of A and B to the original quantity, A, and must therefore be B. Hence the pull of the cart backward on the horse is just equal to the pull of the horse forward on the cart. The horse moves forward in virtue of the fact that the horse presses on the ground backwards with a greater force than that with which the cart pulls the horse back. The cart moves forward because the force with which the horse pulls it is greater than the resistance offered by the road to the forward motion of the cart.

The difficulty is one which is partly caused by the popular loose way of using such words as "force," and by want of careful attention to the actual statement made. The assertion that the cart pulls the horse backward with a force equal to that with which the horse pulls the cart forward is a correct one, perfectly compatible with any amount of forward motion. The statement which was mentally substituted for it by my correspondent was probably something of this kind : "The horse and cart (considered as one inseparable body) are pulled backwards and forwards with equal forces." This assertion would justify the conclusion that the combination would be stationary, but it will now, I trust, be obvious to every reader that this assertion is a widely different one from the former.





THE star-gemmed crown of joyous May
Gleamed in a pale moon's crescent ray,
And charmed me, till I sudden stood
While walking through th' accustomed wood.

What burst of melody runs through
The oaks, and trembles on each bough?
From yonder larch its ancient tale
Of anguish pours a nightingale.

How cam'st thou hither? why resign
Groves where Cephissus' currents shine?
Why leave Colonus' chalky steep,
On ruder shores thy woes to weep?

Rude, but well pleased to welcome thee
From classic lands, to choose a tree
Beside our homes thy brood to rear,
Thy cradle-songs may they but hear.

A thorn, sweet bird, within thy nest
Has surely pierced that love-lorn breast;
So legend tells, and on this night
I half believe the legend right.

Of Itylus the mournful strain,
Darkling, the sad bird sings again;
What terror in its anguish lives!
What zeal for fuller utterance strives!

Come, stranger, to these oak-woods come
In future years and cheer our home;
As with our swallows, none shall dare
From this dark covert thee to scare.

Dearer than all that sings and flies,
Melodious, smooth our dull grey skies;
And when with autumn thou hast ta'en
Thy leave—next April come again!

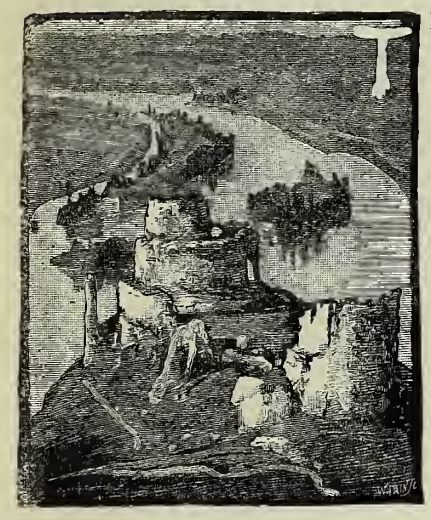
M. G. WATKINS, M.A.

MAJOR GODFROY'S DISCOVERY.

By FRANK BARRETT, Author of "Hidden Gold," &c. &c.

CHAPTER THE THIRTEENTH.

DORIS IS A CHILD NO LONGER.



THE intruders were a dozen Prussian shoemakers.

The major was not wholly unprepared for their coming, for though he never read the journals, and had no correspondence with the outer world, he knew nearly as much of the progress of events as M. Ste. Marie or any other gossiping *flâneur*. When Mère Duval had finished her day's work and left the island, she spent two hours regularly in chattering with her friends and collecting the news of the day; the next day as she served at table she told all she had heard. There was nothing at all peculiar in this familiarity. A French servant, especially in the country, regards herself as a member of the family, and entitled by faithful and obedient service to such freedom of intercourse. She brought news of the declaration of war, of the disaster on the frontier, of the rapid retreat of the French army, of fighting at Etrepagny, a villette only twelve miles distant. Soon after that the French troops appeared passing along the road to Gaillon with long trains of ambulance and artillery. Then the beautiful suspension bridge that spanned the broad river from side to side was blown up, nothing remaining of it but the great piers and a tangled network of iron ties and girders.

With bitter regret Major Godfroy took his existing model to pieces, locked the parts in a box, and effaced from the wall every sign which might betray his secret, knowing that for a time he must suspend his labours. Francs-tireurs were harassing the Prussian advance, and the Germans left no part of their route unsearched; besides, there was fear of a Prussian occupation of Les Andelys. This fear was realised, and in evidence the major received orders to accommodate a dozen military bootmakers. It was reported that the major was a wealthy Englishman, who, to kill time, amused himself in a capacious workshop. "Good!" said the mayor; "he can afford to lighten the burden of the poor peasants." The major felt the justice of this arrangement—knowing how hard it must be for the poor workpeople with their large families to feed hungry soldiers—and so did not appeal against the billeting order. With these artisans occupying his workshop, it was of course impossible for him to continue his efforts; moreover, his attention was demanded elsewhere.

When the inhabitants recovered from the terror inspired by the approach and entrance of the invading forces, and the ordinary affairs of life resumed their routine, the school at Grand Andely, which had suspended instruction for a time, re-opened. The major accompanied Doris on the day of her return. It was an unusual thing for him to leave the island; but there was nothing at present to detain him there, and Doris was fearful of the soldiers. It was four years since they had walked together, except on the island, and Doris put on her best things for the occasion. She was proud to have him with her; occasionally she looked sidelong at him, saying to herself, "There is not such a fine old gentleman in all the world as papa; he is a grander soldier, with his tall figure and white moustache and deep fine eyes, than the little Frenchmen and big Germans."

There seemed to be soldiers wherever the eye rested. They were drilling in the Place, they were exploring the ruins of Château Gailliard, they were cleaning their accoutrements at the doors of the houses, they stood in groups in the streets, they wandered about in parties of two and three, smoking cigars or long pipes with porcelain bowls. They all looked common, vulgar men; so the major felt no surprise that they stared very hard at him and Doris as they passed. In the boulevard, where the path was narrow, they saw three young officers and a fourth young fellow in a close-fitting tourist suit, with a linen-covered book under his arm, coming towards them. The major saluted them as they fell back to allow him and Doris to pass.

"They did not return my salute," said the major; "and yet they must have seen me, for they stared very hard."

"That was very rude; soldiers should salute, shouldn't they, papa?"

"English gentlemen do. Is there anything peculiar in my appearance this morning, Doris?"

"No, dear; you look as nice as usual."

"And you are not wearing anything odd or unfashionable?"

"I think not."

Doris kept her eyes on the path, and her cheeks were suffused with pink. As the major looked, the truth slowly dawned upon him that Doris, though only fifteen, was no longer a child. "How sweetly pretty she looks this morning!" he said to himself; and then,

"Dear me, how the child has grown! the looks almost a young woman. And she does not hold my hand as she used to." Doris had slipped her hand under his arm, and he had folded it unconsciously. "Why, she is up to my shoulder. Her hair has certainly grown much darker; and how charming the dark lashes of her eyes look upon her fair skin!" Doris, conscious of observation, lifted her eyes; they twinkled and sought the path again.

"Why are you looking at me so curiously, papa?" she asked, with a little laugh.

"I was noticing for the first time the difference in you since you used to trot along holding my hand. You seem scarcely a child now."

She gave his arm a little pinch, and laughed lightly.

"You haven't altered, dear; that's why I seem the same to you," she said.

The major became silent again. "It is well I came with her this morning," he thought. "Providence guards my child, and by accidents such as this discovers perils which I might overlook. It is no wonder that she is looked at; and yet she seems too young for such attentions."

With this new perception Major Godfroy was quick to observe. As they drew near the Hôtel de Grand Cerf, a snub-nosed subaltern, straddling on the hotel steps, turned round and spoke a few hurried words, which brought three or four comrades to his side, and all indulged their eyes as the graceful, slight young girl, chatting with the tall old gentleman on whose arm she rested, passed along the middle of the street; and very much that old major wished that they were *his* subalterns. No one can be dull to admiration. It may be hard for a princess to despise the silent flattery of following eyes; for a young girl, flushed with vigorous life and of romantic tendencies, it is just impossible. Doris could not understand why she felt so light-hearted and gay all day, why her walk to school had been so very pleasant. She thought it must be relief from the apprehensions she had entertained respecting Prussian soldiers, who, after all, did not appear so very disagreeable; it might be having papa for a companion again. But over and over again she found herself repeating his words—"You seem scarcely a child now."

It was dusk when the major came to take Doris home from school, and they walked along almost unobserved; but the following morning an incident occurred which was not without influence upon this history.

As they were again passing through the boulevard towards Grand Andely, they came upon the four young men they had met there the previous morning, sitting on one of the stone seats. He in the tourist suit had his book open and was sketching, one was looking at his work, the others were smoking.

A signal from one of the latter called attention to the major and Doris. The artist looked up, and then returned to his sketch; the rest boldly fixed their eyes on the young girl, impudently regardless of the major's savage frown, and when she had passed, one coughed, then a second, then a third.

"Hush, you fellows!" growled the artist in bad German, speaking low. "Franz, I wonder you don't know better. They're not common *ouvriers;* and you —well, I hope you're not common blackguards."

"I suppose one may cough without giving offence?" retorted Franz, looking uncomfortable, notwithstanding an assumption of indifference. The artist went on sketching in silent anger. "Would you like me to go after the young lady and apologise for having a cold? I will with pleasure, if you say the word," Franz continued.

"Her father would cure you of your affliction for the future, if I know anything of race and temper," responded the artist. "He is an Englishman."

"Ha! that accounts for your punctilious propriety. You're an Englishman also."

The artist proceeded with his work in silence.

"Come, Franz," said one of the others, "you are in the wrong to defend a thing which I, for one, feel heartily ashamed of."

"I ask your pardon, Garton," said Franz immediately. "One feels a kind of licence in this soldier's uniform, which one wouldn't dream of exercising out of it. Give me your hand."

Garton, the artist, dropped his pencil in his book and extended his hand frankly; then, as he took up the pencil and rapidly shaded his sketch, he said—

"I found out this morning that they are English, living on that long island facing the quai, and I had made up my mind to send my card across and introduce myself to my countryman; but of course that's out of the question now. I am set down as one of your asthmatic gang—bother you!"

CHAPTER THE FOURTEENTH.

AN INCIDENT.

BASIL GARTON was the corresponding artist of an English illustrated newspaper. After a couple of days in Andely, he prepared to leave the friends with whom he had marched from Saarbrück, and follow the army marching upon Paris. But before leaving he desired to make a sketch of the broken bridge. The most effective picture was to be got from Ile Content, which commanded a view of the bridge and the Château Gaillard beyond, and these vestiges of ancient and modern military wrecks would form a telling subject. This Basil Garton knew, but he dared not trespass upon the hospitality of a man offended by his own comrades. He conjectured, however, that he might get almost the same effect from a small islet a couple of hundred yards higher up the river; and about eight o'clock the following morning he engaged a boat from M. Lucas, the batelier, and rowed to the spot. He found it would suit his purpose, so carelessly throwing the boat-chain round a willow, he landed, and began his sketch. He looked round once at the lower island, wondering whether he could see anything of the old gentleman or his pretty daughter. The bare stems of the alders permitted

a view of the orchard, with a glimpse of the house and the old wall beyond; but no live thing except a goat met his eyes.

"Quaint old place it looks," he soliloquised, turning away, and working rapidly at his sketch. "It's too bad that my own countrymen should be so near, yet so unapproachable. Confound those silly fellows! Drummond—not an uncommon English name, and yet it seems to have a peculiar significance somehow. I seem to remember my father mentioning some such name. Halloa! What's that?" This exclamation referred to a sudden movement in the willows; looking thither, he found that the chain had slipped, and there was his boat already a couple of yards off, and turning round playfully in the hurrying current.

"Now, what am I to do?" he exclaimed. "Selkirk on an island five feet by three, and my ship going off to Rouen at four miles an hour. This sketch will cost me dear, I foresee, though I do contrive to escape by dint of loud shouting." He watched the boat in silent despair, as it turned and turned and slid down with the tide, and as he watched a merry rippling laugh fell upon his ear. He laughed himself, for the merriment in the childish laughter was contagious; but he looked in vain to see whence the provoking sound came. It seemed to rise from Ile Content, and yet he could see nothing there but the goat, which, to be sure, was turning its head towards him. "It wasn't the goat, that's certain," he said to himself. "Nothing on earth but a pretty little girl could laugh like that."

Just then, from a clump of willow and briar and tangled sedge, a boat slid out, and the "pretty little girl" appeared rowing it. She was not laughing now, but grave with the business of catching the errant boat, which was swiftly approaching. To Basil Garton the attempt to stop the boat in such a current was highly dangerous, and he called out—

"Never mind the boat; let it go. For mercy's sake, get out of its way!"

Doris—for she it was—might have heard him, but taking no notice of the advice, she made straight for the boat. Suddenly shipping her oars, she caught up a small boat-hook, and grappled the side of the oncomer; the two whirled round together, and the next minute disappeared behind an angle of the island. Basil turned pale with fear, then he began to shout. Answer came in the same merry laugh he had heard before; and then Doris slowly rounded the corner with the captive boat in tow.

"Thank Heaven!" ejaculated Garton fervently. He had looked on the awful field of Gravelotte without feeling the same sickening faintness that overcame him with the thought that this young girl was losing her life.

It was hard work pulling the two boats against stream; but Doris knew every advantageous shallow in the river, and so before long came up to the feet of Basil Garton with her prize. His hand trembled as he took the chain of the boat, and he was too agitated to speak.

"Did you think you were going to be left helpless on that island?" Doris asked. "How you screamed!" Then she laughed again, and without waiting for a word of explanation, pushed out into the current, and pulled away to the clump of alders.

"What a fool I am in an emergency!" thought Basil, looking after the boat and its pretty occupant, whose face was yet towards him. "I couldn't find words to express how I regretted the danger she had placed herself in on account of that wretched boat. I haven't even thanked her for bringing it back to me. Did she really think I trembled on my own account, and called for help for myself? What does it matter? I shall never see her again. And yet I would have her retain a better impression of me than such an absurd idea conveys. Perhaps she recognised me as one of those who behaved rudely when she passed us yesterday in the boulevard. I would like her to think me no worse than I am."

The boat disappeared behind the clump, and presently he saw the tall, graceful figure of the girl walking through the orchard. She bent over the goat. He could hear her voice speaking to the browsing creature. He would have given anything to have stood beside her at that moment. Why? Why did the thought that this pretty, unknown child believed him to be a cad and a coward rankle in his heart? She was but a child, and he a man ten years her senior. It would make no difference to her happiness to know that he was a decent young Englishman, who would have risked his life as readily for her as she had for his boat, and her just or unjust estimation could not affect him for better or for worse. These reflections occurred to him; nevertheless, he did not lose the impression received by his mind as he stood looking at the girl bending over her goat.

Whatever he felt, it was impossible to relieve himself of the discomfort. He was too manly to make an explanation to the boatman with the view of having his character cleared by gossiping agency; and at mid-day he mounted the diligence that took him away from Les Andelys with an inexpressible and somewhat unaccountable feeling of regret.

CHAPTER THE FIFTEENTH.

THE MAJOR RENEWS HIS EFFORTS.

FOR nine months the Prussian shoemakers worked in Major Godfroy's workshop, and during that time he never suffered Doris to go to the Andelys without protection. He had no wish to restrict her liberty because of the gallantries of these Prussian officers; on the contrary, he desired her to become accustomed to admiration, that she might not be dazzled by any flattery coming at a moment when she was unguarded. The men themselves gave him little trouble: their approach was barred by the difficulty of making themselves understood; and then there was something in the major's manner which forbade aggressive language towards his pretty daughter, and so they contented themselves by dropping flowers in her path, sending bouquets and occasional verses anonymously, and such-like sentimentalities. At

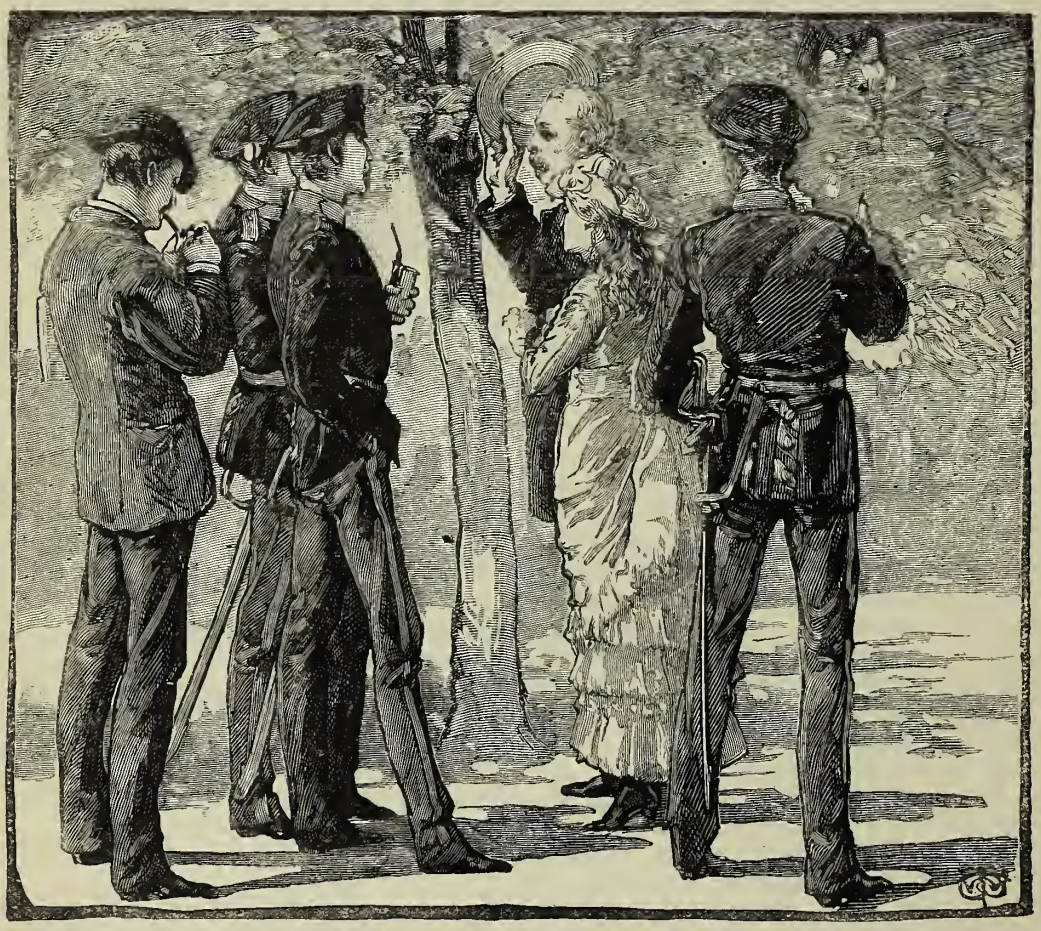
the end of nine months the order came to march. The bootmakers packed up their awls, and shouldered their rifles; the bugle sounded, and with a cheer the unwelcome visitors turned their faces to Fatherland, and marched out of Andely. There followed a general cleaning of all the houses, as though a pestilence had been in the place, and then the villettes slept again.

It seemed dreadfully dull to Doris, going to school and returning with Mère Duval, and meeting no one smoke, scarcely noticing her as he passed up-stairs to his room, and looking so anxious and careworn.

"You are grave, Doris. Has anything unpleasant occurred to-day?" the major asked, noticing her unusual silence at dinner.

"No, papa—nothing that I might not have expected. But I missed you very much. I have felt so happy walking with you every day for so long, and Mère Duval ——" She paused, frowning.

"Mère Duval is a very kind old woman."



"THE MAJOR SALUTED THEM AS THEY FELL BACK" (*p. 673*).

by the way. Her sympathies, of course, were with the French; she hated the Prussians collectively, but individually she had found very little in them to dislike. The young men in Andely, compared with the smart young officers, appeared ill-mannered boors. At school she felt out of place, where now there were no girls of her own age, and the teachers were priggish and stupid. And the weather was bad: it rained all day, and the paths were muddy and soft. Everything conspired to make her feel dull. When papa came from his workshop, how different he looked to the neat, white, aristocratic old gentleman, whose arm she had proudly taken morning and evening along the pleasant boulevards, now grimed and disfigured with

"She is very good, I know; but she has little mannerisms that are provoking when one feels low-spirited—'Ecoutez moi—que je vous dis' at every sentence. And everything seems dead. I am very foolish to be depressed by such trifles, but I can't help it. And now, dear, let us talk about something else."

"What shall we talk about?" asked the major, looking at her thoughtfully.

"Tell me about Paris and London. I can only just remember a great crowd of people."

The major gossiped about Paris, remarking the interest and pleasure with which Doris listened, and then he said—

"I think I can tell what my little girl is wishing—that I would leave my workshop, and take her about in the great world, amongst brilliant shops and gay people. It is quite a natural wish, and one that I share fully with her."

Doris looked at him for a moment in silence, while gratitude suffused her eyes with a tear; then she rose hastily, and going to the major's knee, put her arm about his neck, whispering—

"What a selfish girl I am, and how generous you are! But for all my selfishness, dear, I couldn't be happy anywhere if I took you away from the work that gives you such pleasure."

"It is not the work that gives me pleasure, but the purpose that work is to serve; and your happiness forms a great part of that purpose. Be patient, dear. In two years your wishes and mine shall be gratified—two years; perhaps less if all goes well."

He needed no spur to exertion, yet it seemed that he had received a new incentive. Possibly he felt it necessary to compensate by heavy labour for the enforced rest of the past months. He infringed more and more upon the hours of relaxation, and obeyed no rule of time. He would have his lunch or breakfast brought to him in the workshop at times, grudging the space for dressing and washing. Often Doris heard the whirring of his lathe when she closed her eyes to sleep, and waking, heard the same sound. His manner grew almost terrible in the fierce excitement gleaming from his eyes, the irritability with which he listened to any domestic question which called for his decision, the petulant haste with which he ate and drank, and then, without a word, hastened back to his work; and, above all, in his suspicion of being overlooked.

Doris was distressed by these signs as they grew in intensity; and one day, when his excitement, which had been continued during the week, was replaced by a dull apathy, equally distressing to see, she closed the door, and drawing a chair beside his, sat down, and took his hand in hers. He seemed unconscious, for his deep-sunk eyes still looked through the window upon the bright spring verdure in unsympathetic stillness.

"Papa, dear, Doris wants to speak to you," she said. The voice aroused him, and he looked at her with a feeble smile, and pressed the hand he found holding his.

"Do you remember what we talked about the day you re-commenced work—months ago, just after the Prussians left Les Andelys?"

"Yes, Doris, quite well," he said.

"Well, papa, I want to revoke all I said then. I was weak and silly, and spoke simply from thoughtlessness and a feeling of idle pettishness. I was more a child then than I am now, and you can't tell how I have repented my words. I don't want to go into cities. I shall be content to live all my life in the beautiful country here if only you will come and walk with me sometimes, and be my companion. See how lovely the country looks! who can want to leave it, or be discontented here? And you, dear, were happier without work than you are with it. Give up your labours, and let us enjoy the simple life of river and wood, and hill and valley, and blue skies."

"My sweet little Doris—good little Doris!" the major said, smoothing her hair, and looking at her anxious face with affectionate emotion. "It is not only *hope* which makes me struggle from day to day, but *fear*—a terrible fear that grows as the hours fly. Last autumn there were two years left for me to achieve an end which seemed quite near; now there remain but eighteen months, and my object is as far from attainment as ever. Farther!" he cried, starting up, and forgetting the girl—"farther! for then I was at work, and now I sit idly here, as if my honour was not at stake—my duty done. Is it William Godfroy who gives himself up to supreme despair while his duty is unfulfilled, or a fool and a knave, who forgets even the dictates of common manhood?"

With these words he rushed from the room and re-entered his workshop, leaving poor Doris awe-stricken with this exhibition of passion. Half an hour later he came from the workshop, less excited, but clearly in deep agitation. Mère Duval, who was in the room with Doris, moved towards the door as he entered; but he stopped her. "I want to speak to you as well as to my child," he said. Speaking in English, he said, "Doris, dear, I am calmer in my mind than I have felt for many, many days, and I wish you to accept what I am about to say as a wise decree, which you should not attempt to revoke. For reasons which are but too evident, it is necessary that I separate myself from you until this terrible anxiety which oppresses me night and day is ended. You must not see another such violent scene as the past, and while I am so agitated they are likely to recur. No, dear, do not try to dissuade me even with your eyes. It is for your good, and it must be so." He turned from the piteous face to Mère Duval, and spoke in French. "Mère Duval, you must make arrangements for living here night and day for some time. I have a labour before me which I shall not leave until it is finished. I shall sleep in my workshop, and you will bring me food there; I shall not quit it, except for purposes connected with my work. During this time you will watch over my child. I place her under your protection."

Doris was too bewildered for speech. Poor child! she stood in a position which would have tried the wisdom of older heads than hers; and Mère Duval made no opposition, partly because it was her duty to obey, partly because her inclination was gratified in having the protection of her "ma'mselle." So the major's camp-bed was taken into the workshop, and there he lived from month to month, seeing Doris when she carried food to him—a service which she insisted upon rendering—but otherwise maintaining perfect seclusion. Doris saw no alteration in him. In the few minutes they were together he was as tenderly affectionate as ever, encouraging her to bear the temporary estrangement cheerfully.

"It is only for a time," he said. "All goes well. Before long my work will be finished, and then

nothing can separate us." Words to this effect he repeated frequently.

CHAPTER THE SIXTEENTH.

OLD FOES.

DORIS stood one morning in July by the door of the workshop, a bowl of *café au lait* and a roll upon the wooden trencher in her hands.

"Breakfast, papa, dear," she called.

"Set it down by the door; I will take it when I want it. I am very busy," answered the major, his words mingled with the tapping of a hammer.

Doris set down the trencher, but still lingered; plucking up courage, she presently called out, timidly, "I want to speak to you, papa."

"Well?" and the tapping continued.

"Mère Duval wants to know if I may go to the fête at La Raquette this evening."

"Of course you may."

"Would you mind having dinner an hour earlier?"

"It's all the same to me."

Doris still waited; but it was some time before she could find courage to put the next question.

"Papa, dear, Mère Duval says she does not think you would like me to dance at the fête."

There was no response but the gentle tapping of the hammer; probably the timid voice had not been heard. Doris feared the silence signified disapproval of dancing; however, the question must be answered, so after another pause she ventured to say, in a higher tone—

"I suppose you agree with Mère Duval, papa?"

Then the hammer stopped, and the major asked impatiently—

"What does Mère Duval want to know?"

"She wants to know if I may dance or not."

"Dance! Certainly not!" and then the hammering re-commenced.

When he felt faint with want of food, he indistinctly remembered ordering his breakfast to be placed at the door. He found it standing outside, the coffee perfectly cold: so much the better, it took less time to drink. All the afternoon he was at the lathe, finishing the last wheel of his model. No wonder he was oblivious of outer sounds. The sudden snapping of the fine chisel he worked with obliged him to stop prematurely. Looking in the rack, he found he had not another suitable, and that he must go over to Andely and borrow one of Ste. Marie. On the doorstep, under a cover, stood his dinner. He stepped over it, pulled the door to, and locked it carefully, then he hastened to the steps, and rowed quickly over to Andely. He had become utterly careless of appearance in these later days, and neither washed the smoke from his hands nor changed his working dress to go into the villette; one remembering him—precise, calm, faultless in dress and manner—might well pass him now without recognition, running across the Place in blue trousers and blouse, without collar or necktie, his face red and black with excitement and smoke, and a black casquette on his head.

He made his wants known quickly. Ste. Marie hastened to find the required tool.

"Have you seen the English gentleman?" Ste. Marie asked, rummaging a chest.

"No. That chisel will do—the little one—thanks! thanks!" The major took the tool, and was running away.

"But one of them wants to see you. He has been over to the island," Ste. Marie said, putting his hand on the major's arm to stop him.

"He has been to see me—who?" the major asked, stopping dead short.

"One of the English gentlemen. I was told his name by the other gentleman. Monsieur Go—Go—Nom d'un chien! What was it?—Ga—Gar—Gar—?"

"Garton?" the major asked fiercely.

"That is the name. He said he would cross and find you this afternoon. I have not seen him since. But you must have passed the other monsieur; he was on the Place. I saw him there not two minutes before you came in here."

"And what is his name?" the major asked in the same angry tone, grasping the chisel in his hand, as if he were preparing to defend himself against the assault of an enemy.

"I don't know. But there, you can see him." Ste. Marie pointed through the window. "See—sitting on the seat beside your old friend Montier."

The major followed the direction of M. Ste. Marie's finger, and saw a man in a frock coat and shepherd's plaid trousers, resting with his elbows on his knees, and listening to M. Montier. In that position the major could only see the top of a very shiny silk hat; but presently the man threw himself back, and resting his elbows on the back of the seat, displayed his face fully: it was but little changed from when the major last saw it. A decade of vice had made the vicious expression more vicious, the features sharper and older; but their essential points were unaltered. The character of the man was not less revealed by the flashy assumption in his dress; he was still the vulgar "horsey" swindler—Blake Standish.

The major recognised him instantly, and there was a change in his manner which astonished Ste. Marie. The excitement vanished, and he stood erect, looking out at the man on the Place with cool, steady eyes.

"Standish!" he said, with a firm voice.

"Truly; and now I remember hearing the name mentioned when they were talking."

"They?—Standish and Garton?"

"Yes. They came together by the voiture from St. Pierre this morning."

The major nodded. The enemy had come in sight, and he could measure their force.

"Standish, Garton, Montier—three to one. Well, I have the position," he thought, a grim smile touching the corners of his lips; then he said, "M. Ste. Marie, can you lend me a revolver?"

"No," answered Virton, with emphasis; "I will not lend you a revolver."

"I give you my word of honour I will use it only in self-defence."

"Monsieur will pardon me if I refuse."

"Yes, certainly. You are quite right. An iron bar or a hammer will serve as well. I am as anxious as you to avoid violence. It will be well to warn my enemies at once." Saying this, the major opened the door, and marched across the road.

Blake Standish had once more dropped into his former position, his elbows on his knees; he was intent upon brushing the dust from the toe of his much-cracked patent leather boot with the faded kid glove he carried for ornament, and it was not until he heard a voice addressing him in English that he raised his eyes to the strange figure before him.

"Blake Standish," said the major, "you intend to rob me if it is in your power; you have robbed me before, and have escaped. You shall not do so again. I warn you that you will make the attempt at the peril of your life. My treasure is upon my island, and I shall keep it. I do not wish to stain my hands with your blood, and so I bid you beware how you follow me!"

Before Blake Standish could recover from the surprise of this address—indeed, before he had completely recognised the speaker—Major Godfroy had crossed the Place, and disappeared by the narrow street leading down to the quai.

All the world had gone to the fête at Raquette; the shutters were closed, the streets were empty. A wandering Savoyard with a performing bear, who had come into the town to earn a few pence, had betaken himself to the water-side, and sat there beside his brute, eating crusts from his wallet.

"A sou, if you please," said the beggar in a whining voice. "I have walked ten leagues, and have nothing but these crusts."

The major stopped, looking at the bear reflectively.

"What do you want for your bear?"

"Ah! monsieur, I have nothing else in the world."

"What do you want for your bear?" repeated the major. "Will you sell it for three hundred, four hundred, five hundred francs—what?"

With some difficulty the Savoyard was induced to name a price, which the major agreed to pay when the beast was secured upon the island.

Emptying his wallet, the Savoyard drew it over the muzzled head of his bear, and then led him into the boat.

The major drove a stout staple into the wall of his workshop, close by the forge, and to this the bear was chained; then, having paid the price, he rowed the Savoyard back to the shore. On the way the Savoyard said—

"You will keep the staff by you. 'Golot' knows the smell of it; if he rises without being told, strike him. I warn monsieur that he is savage when he is hungry."

"So much the better. What food must he have to keep him alive?"

"Some fleshy bones—three or four pounds a day—and crusts."

When they separated, the major went to the boucherie, and bought four pounds of bone.

"Poor gentleman, he must be mad!" said the butcher's wife when he had gone.

CHAPTER THE SEVENTEENTH.

THE FÊTE AT LA RAQUETTE.

LA RAQUETTE is a village on the heights above the Seine, some four or five kilomètres from Andely—a collection of clay-built cottages and farms, with deep, thick straw thatches, covered with moss and house-leek and iris, standing in the midst of apple-trees, and sheltered by a thick wood. Near the village, and upon the skirts of the wood, there is a wide spread of short sward and thyme, that yields a sweet scent under the pressure of the foot.

It is quite flat for a width and length of two hundred feet, then it sweeps abruptly down to the little stream running towards La Vacherie, and rises on the opposite side, covered with oaks and silver birch, to Letouille. One can just see the quaint steeple of the church there, standing on the edge of the bold ragged rock that towers over the silvery river. It looks like a pepper-pot.

The inner angle of the flat hill-top was bordered by the wood, the outer angle by a row of canvas-covered booths; in the centre the games took place.

It was about six o'clock when Mère Duval and Doris arrived—Mère Duval in her most elaborate cap, her leather shoes, and grey stockings; Doris in a light summer costume and hat that were of the very latest Paris fashion. A rough game for boys was just going on: *Le Cloche de St. Paul.* Four buckets of water and one bell were attached to a kind of gallows, with strings depending from them. A dozen players, blindfolded, groped about to find the strings, while the tambour de ville rolled his drum, and the players' friends shouted instructions to them. When five boys had each found a string the tambour ceased to roll his drum, and they pulled. Those who had the wrong string emptied each a pailful of water upon his head; the fortunate ringer of the bell received a rabbit for his reward. After that came the *Course des Œufs*, for girls to compete in. Two rows of eggs were arranged along the ground, and the competitors started in pairs when the drum began to rolll; whoever amassed her row of eggs in a basket without breaking one, and in the shortest space of time, received the eggs for her reward, and the commendation of all good housewives as well. Benches were placed for the *grand monde*, and Mère Duval and Doris were accommodated with places, for Mère Duval was well known, and she took care to make every one understand that her young mistress was not a mere peasant or farmer's daughter, but the heiress of an English gentleman, who might be a "Lord Mayor" if he chose—a young lady who never took a broom in her hand, nor knelt beside the river to wash linen, nor did anything, in fact, but what was unnecessary and lady-like. When the light faded, dozens of lamps and Venetian lanterns were lit, which made the scene look quite fairy-like.

Doris was beginning to think she should like to leave her seat and look at the gaily dressed barraques,

when some one, speaking English close behind her, said—

"May I ask if your name is Doris Godfroy?"

She looked up in astonishment, and seemed to recognise the good-looking fair face of the young man who spoke. Something was familiar—perhaps his dress, which was not black nor cut in the Norman country fashion; but she was too astonished to recollect anything at that moment.

"My name is Doris Godfroy," she answered in a frightened tone.

"May I sit down by your side, and speak to you?"

"You must ask Mère Duval."

Mère Duval was already on the alert, and scanning this audacious young man who dared to address her "ma'mselle" without first asking her permission. He looked like a gentleman—quite a bourgeois, in fact; but then it was not safe to trust to appearances.

The gentleman was amused by the stern examination of the old lady, but he made her a low bow, and asked her permission—in bad French, to be sure, but with the utmost politeness.

"You are not a Prussian, are you?" asked Mère Duval.

"No; I am English, like mademoiselle. My father and hers were great friends."

That was sufficient. A few hurried words between the old woman and the young lady followed, then Doris made room for him to sit by her side, turning her face towards him with a shy glance, and a sweet bashful smile trembling on her lips.

"Do you remember me?" he asked.

"I am not sure."

"Don't you recollect saving my boat and me?"

"Oh!" exclaimed Doris in a long-drawn note of recognition. Then she laughed.

"You thought I was alarmed for my own safety, I believe."

"I thought so then, but since I have sometimes thought differently, and that it was for my safety you were anxious."

"Then you have thought of me?"

"Very often—oh! very often—that is"– she checked herself and dropped her eyes—"now and then, you know, in the long winter evenings, when one has nothing to do but remember."

"I have not altered—yet you did not recognise me; now, you have altered, but I knew you directly."

"Then you have thought of me as well?"

"I have never been able to get you out of my thoughts, and I came from England to find you."

"That was very kind of you. How have I altered?"

"Last year you were little more than a child: now you are little less than a woman."

Doris gave a little smile of satisfaction.

"The games are nearly finished; would you like to look at the stalls?"

"Very much."

Basil rose, and offered his arm to Mère Duval.

"No, monsieur," she replied in high good humour; "I am only a domestic. Ma'mselle will take your arm."

"Sensible old lady!" said Basil to himself, and he offered his arm to Doris, looking with more than artistic admiration on her pretty sylph-like figure as she slipped her hand under his arm.

They went to the best booth in the fête, where by risking a sou one stood a very remote chance of winning a whole set of coffee-cups, or a beautiful coloured picture representing all the great men of France in proper costume, from Charlemagne to M. Thiers, or a pair of beautiful Bohemian glass vases, or a grand soup tureen, or, indeed, any one of the splendid things collected in the barraque. There this rich English gentleman put down sou after sou, as if money were of no value, until Mère Duval and Doris had won enough rubbish to fill a booth of their own if they had had one, and even the grasping Norman spirit of Mère Duval was satisfied.

Basil watched with keen delight the pleasure and mirth that sparkled in Doris's pretty eyes as she added basin and sugar-pot and vase to the heap already in the clutches of the eager and excited old woman. It was pleasure untainted with the sordid desire of gain that lit up her face; there was not a hard line anywhere, and when she turned to leave the booth her countenance was as gay and expectant as at first. How fresh and child-like and sweetly simple the girl was! How different from the languid belles and trained coquettes he had met so frequently in society!

The moon was rising over the wood amidst the pearly clouds that dappled the sky, when they turned their faces towards home—Mère Duval bringing up the rear, with her lap full of crockery.

They walked into the village, where M. Lucas had promised to wait for Mère Duval and carry her and Doris to Andely in his voiture.

"There is just room for three on the seat," said Mère Duval.

"What a pity!" sighed Doris.

"And now we must bid you good evening, and I thank you extremely, monsieur, for your attention to ma'mselle and to me," said the polite old woman when they came to the "Café des Trois Amis," where M. Lucas waited.

"I will stay with mademoiselle while you seek M. Lucas," said Basil firmly, as the sound of laugh and song came from the café and grated on his ear. "What kind of man is M. Lucas?" he asked of Doris as they waited in the moonlight for the return of Mère Duval. He was not without a feeling of jealous envy.

"A nasty fat man!" said Doris with disgust. "I shall be dreadfully squeezed, and the cart will go bump, bump, bump all the way. I shall cry before I get home. It would have been so delightful to walk."

But Doris was not to be forced to this unpleasant extremity, for presently Mère Duval came from the café, delivering Parthian shots at M. Lucas, who, she explained, was more than half tipsy, and with whom she would not trust her china, much less her dear ma'mselle, to descend the steep road that led to Les Andelys. They must walk home alone—unless mon-

sieur would not think it too great a trouble to accompany them.

"What do you think?" Basil said, looking at Doris. "Do you think it will be too much trouble for me to protect you?"

She shook her head, laughing, and pressed his arm unconsciously in her gratitude.

So they started off through the apple-trees, and I much fear that at that moment neither of them felt how deplorable a thing intemperance is.

"Well, now we will be quite serious. When I was here last year, and asked the names of the tall old gentleman and the pretty young lady who always walked together, I was told 'Monsieur Drummond and his daughter, Mademoiselle Doris Drummond.' I said to myself, 'I have surely heard my father mention that name,' but that was not peculiar, for my father was a solicitor and had many clients. Afterwards, when I came to think of you and said to myself, 'Doris Drummond,' it struck me again that the name was



"'MAY I ASK IF YOUR NAME IS DORIS GODFROY?'" (*p.* 680).

CHAPTER THE EIGHTEENTH.

THE RETURN FROM LA RAQUETTE.

THEY stepped along briskly through the apple orchards, laughing and chatting, and Mère Duval, forgetting her indignation with M. Lucas, soon joined in the mirth, trudging behind the young people with her burden of cherished crockery. But after a time the two spoke in English, then she concentrated her thoughts upon calculating the worth of her gains.

"Did you say your papa and mine were friends?" Doris asked.

"I believe so. That brings me to the serious object of my visit. Shall we discuss it now?"

"Oh, yes. It is right to talk seriously sometimes."

familiar—not Drummond alone, but Doris. If my father had been alive I could have asked him the question at once; but he has been dead eight years. My business obliged me to go from Paris to America, but I still continued to think of you and puzzle my brains as to where I had heard the name. One day it occurred to me that I must have heard it in connection with Major Godfroy; but that put you farther away than ever, for your father I had seen, whereas Major Godfroy's Doris Drummond was an orphan. However, the idea would not forsake me that you must be in some way connected with the other Doris, and when I arrived in England last week, I went to the solicitor who succeeded my father in the firm, and told

him what occupied my thoughts and perplexed me so frequently. The solicitor is a clever man, far more clever than I am, and after some thought he said, 'It is quite possible that Monsieur Drummond is Major Godfroy. From what we know of him he is a silent man, one not likely to announce his name unless it were asked; but the child that he adopted as his daughter would tell people her name, and from her addressing her foster-father as papa, they would naturally infer that his name was Drummond also—and so they would slide into an error which he might not care to correct.'"

"Why, that is exactly the case!" said Doris, with a laugh.

"Thank Heaven!" said Basil Garton seriously. "Well, since your papa—Major Godfroy—left England an event has taken place of the utmost importance to him and to you; it is to inform Major Godfroy of this that I hastened to Andely. I crossed the river this evening, but I found the house closed, and though I heard sounds in an adjoining building, I could neither open the door nor make myself heard. It was by accident that I walked to the fête, where I found you sitting—a very fortunate accident."

A smile came into Doris's face; she too thought it a fortunate accident.

"And now I have told you all I know," said Basil; "will you tell me your history?"

"You know as much as I do," she said. "It has happened just as you imagined. I was too young to wonder why people called papa Monsieur Drummond, and by the time I had learnt sufficient French to undeceive them it had ceased to be strange to me. I never thought about it. I was quite a child then, and children take things for what they seem, without questioning what they are. I don't know that I have any history worth telling; my life, you see, has been so simple and eventless. I can scarcely remember what happened before we came to live on Ile Content—I was so young then." In a few simple sentences she told him of her life on the island; of papa and his constant application to a mechanical work which was to produce great results, but of which no one knew anything definitely; of Mère Duval, who was sometimes cross, sometimes exasperating, but always faithful and good; of her garden and domestic pets, and of her delight in being permitted for the first time to go to a fête. They came to the zig-zag path leading down the side of the cliff; on the bluff opposite, the grey ruins of Château Gaillard stood out boldly in the moonlight; below was Petit Andely and the broad river dotted with islands.

"There is our island. Oh, how beautiful it looks in the moonlight!" said Doris.

"You would not like to leave the pretty home and simple life, would you?" asked Basil.

"I wanted to leave it a year ago; it was all so dull and dreary, and papa promised to take me to Paris and London when his work was finished; but I don't think I should care to go away if I might go to fêtes: that is," she added, with frank *naïveté*, "if you would stop here and accompany me."

"There are other monsieurs," said Basil, laughing.

"Yes; but I wouldn't promenade with any one else now."

"Why not?"

"Because I like you better than any one else, except papa."

"Better than Mère Duval?"

She reflected a minute, and then looking up in his face, nodded.

He was tempted to catch up the little hand resting on his arm and press it, but unfortunately he carried a gorgeous piece of painted crockery, of which he had relieved Mère Duval.

"Bother the mug!" he muttered.

"What did you say?" asked Doris.

He coughed, and answered evasively, "I fear I must return to my work in a week, so you will have for a companion some more fortunate fellow."

"No," she said emphatically, "I will have no one else. There's none nice enough." Then in a tone of distress, "And I would rather stop at home than go to a fête without you now."

"You dear little goose!" he murmured gently, and she, looking into his face, caught the warm gleam of love from the eyes that looked into hers.

END OF CHAPTER THE EIGHTEENTH.

THE PHILOSOPHY OF CLOTHING.

BY A GOVERNMENT ANALYST.

AMONG the many marvellous things undreamt of by philosophers of old, not the least remarkable is the fact that in all climates, and at all seasons, the human blood and the human body are maintained at a uniform temperature of about 99 deg. Fahr. It seems strange, indeed, that the temperature of the body should be the same whether exposed to the burning rays of a tropical sun or the rigours of an Arctic winter; yet, in the healthy living body, science has shown us that it is so, and that even a very slight increase or decrease of temperature is a dangerous symptom.

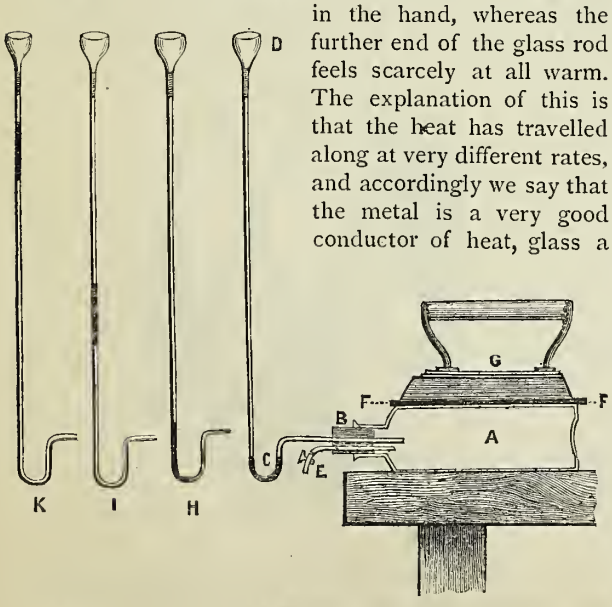
Now-a-days even Macaulay's "merest schoolboy" is familiar with the fact that the human body is a furnace, wherein food-fuel is being incessantly consumed; the natural heat of the body being produced by the combustion of the carbonaceous portion of our food, such as butter, fat, oil, potatoes, flour, &c. At present, however, it is not our purpose to dwell upon the source of such heat—where it comes from—but rather to consider what becomes of it, and how we

may regulate its loss with a view to securing the healthiest thermal conditions for our bodily development.

In the first place, then, we find that our bodies lose heat in four different ways, viz., by radiation, conduction, convection, and evaporation, and these physical processes we shall very briefly explain and illustrate.

If we heat a poker to bright redness, and hold it near our face or hands, we feel a certain heat, and the reason why we do so is because the poker, being warmer than our bodies, radiates part of its heat, and this it would continue to do just so long as it remained warmer than the surrounding atmosphere, or any objects in contact with it. The same thing holds good with dark heat, and the reason why after a time a tea-pot and its contents become cold is just because the heat is radiated into the colder air surrounding it; for a law of communism obtains throughout the realms of nature, by which water seeks a common level, the atmosphere a constant pressure, and heat a uniform distribution. So the dark heat of our bodies, like that of the warm tea-pot, will be radiated into the surrounding air whenever and so long as the external temperature is lower than 98 or 99 deg. Now, as we are all but too well aware, in this climate of ours, except in the direct rays of the summer sun, the temperature of the air never reaches the above figure, so that practically our bodies would be constantly losing an enormous amount of heat, were radiation allowed to proceed unchecked. But by using a cosy for our tea-pot we prevent it from parting with too much of its heat; so by adopting a suitable cosy for our bodies we shall have radiation practically under our control.

Now to consider conduction. If we take a small rod of metal, such as copper, and a similar one of glass, and place one end of each in a gas-flame, we shall find that before long the end of the copper rod farthest from the flame will become too hot to be held in the hand, whereas the further end of the glass rod feels scarcely at all warm. The explanation of this is that the heat has travelled along at very different rates, and accordingly we say that the metal is a very good conductor of heat, glass a very bad one. Again, in winter, while linen sheets feel quite chilly, woollen blankets are comparatively warm. The reason of this is that linen or cotton is a very good conductor, and allows the heat of the body to pass through without much difficulty, while the woollen material of blankets is a very bad conductor and thus prevents the heat from escaping so rapidly.



EXPERIMENT TO ILLUSTRATE THE CONDUCTIVE PROPERTIES OF CLOTHING MATERIALS.

Not a little of our bodily heat is lost by convection. Cold air, as every one knows, is heavier than warm, and the heaviest bodies always seek the lowest level; so with air, the cold sinks down and thus drives the warm up, for heated air does not ascend by choice, but simply through being displaced and driven up by an inflow of air at a lower temperature. By this process of convection our bodies are constantly losing heat, for as they are always warm, the immediately surrounding layer of air gets heated by radiation and rises or is driven upwards by an under-current of cold air, which in turn ascends as soon as it gets heated; and so, even when there is no wind to change the air about us, a constant current is set up simply by the heat of our bodies.

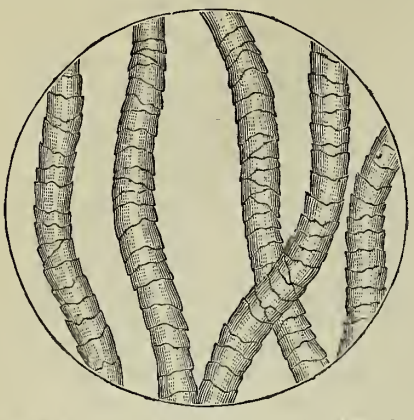
Last, but not least in importance, is the heat lost by evaporation. Whether we are sensible of the fact or not, a constant evaporation is going on over the whole surface of our bodies, for on every square inch of our skin there are several thousand pores, and in the whole body some seven millions of them, by which about twenty ounces of waste matter is daily removed from the system.

Under ordinary circumstances this passes off mainly as vapour or steam. Now it requires but little reflection to recognise the fact that it takes a great deal of heat to produce steam in our boilers, so in the body a considerable amount of heat must be used up to produce this vapour, and of necessity the body must lose an amount of heat corresponding with that used up in producing this invisible vapour. But in addition to the evaporation from the skin, we must not forget that water in the form of vapour is expelled from the lungs as often as we breathe.

In this fashion, then, the natural heat of the body becomes dissipated. Ages ago, however, our ancestors discovered that the food necessary to keep up steam in the human engine was not to be had without trouble or expense. "Now can that trouble or expense be reduced in any way?" was the problem which (perhaps unconsciously) they set themselves to solve, and at least one solution of which we have in the fact of our wearing clothes.

It is true that nature has to some extent made provision against loss of heat, for when heat is escaping from our bodies too rapidly the pores and bloodvessels contract, and we have that appearance of the skin known as goose-flesh which must be familiar to every one on baring the arm on a cold day. Still this is by no means sufficient to prevent excessive loss of heat, so we must consider what is the best arrangement for this purpose. If we examine nature's children we find them provided with fur, hair, or feathers, each in their several spheres most admirably adapted to their wearer's needs. If we make a closer

examination of the way in which these materials preserve the heat of the animal's body, we find that it is by keeping a layer of warm air round the skin,



MICROSCOPIC APPEARANCE OF FIBRES OF WOOL.

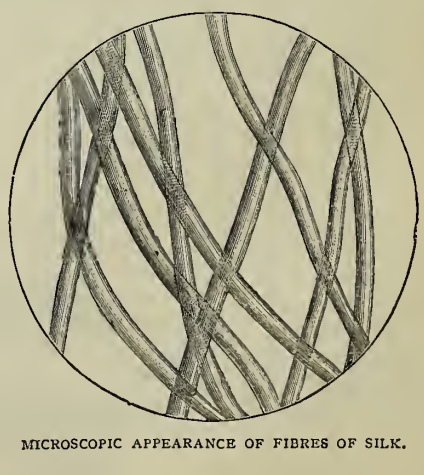
for the air in penetrating through the fur or feathers becomes finely divided, having to pass as it were through a great number of little tubes, and by contact with the warm hairs which form the sides of these narrow passages, gets heated before it reaches the skin.

From various considerations we are practically debarred from using feathers, and in this climate fur is likewise unsuitable for our ordinary garments, so that wool and silk are the only animal products at our disposal; but we have, besides these, several vegetable materials such as cotton, linen, &c., which are capable of being made into serviceable cloth. Now what we want for the clothing of our bodies is some material which, while comfortably light, shall sufficiently retain the heat and at the same time admit of free ventilation.

Our ancestors simply by the teaching of experience have solved so many of our every-day problems for us, that many people are inclined to remain satisfied with things as they find them and pay little heed to the teachings of science. We use pretty much the same materials for our garments that our forefathers did, but not satisfied with their merely experimental knowledge, we wish to know why these materials are employed. To supply the most important part of this information, we must refer the reader to the accompanying diagram (p. 683) of a simple apparatus illustrative of the conducting properties of various clothing materials.

A is an ordinary glass medicine bottle with flat sides, and empty. B is a tightly-fitting cork with two holes, through one of which passes a narrow tube, E, fitted with an air-tight cork or a small stopcock. Through the other hole in B, passes one end of the glass tube, C D, bent at C, as shown in the figure, and with a small funnel fixed on the top by india-rubber tubing. A few drops of ink are poured into this tube, and when the apparatus is fixed up as shown in the diagram, E is opened to allow the ink or coloured liquid in C to rest at the same level on both sides of the bend. The stopcock, E, is then closed, and the whole apparatus is placed near the edge of a table. G is a flat-iron, which should be heated till it can scarcely be borne on touching it with the fingers. The cloth F, which we wish to test, is laid on the upper side of A, and the warm iron placed above it. If we wish, for instance, to compare flannel, silk, cotton, and linen, we begin with the woollen material; place a piece in the position F, and note the result. The warm iron is pouring forth heat, not a little being received by the flannel F; some of that heat passes through the cloth, and warms the upper side of the bottle, which in turn parts with some of its heat to the air contained inside. The heated air expands; it can find no exit by E, but by overcoming a certain resistance it can accommodate itself through C, and it does so by pushing the column of coloured liquid before it according to the degree of its expansion, which practically means the amount of heat which passes through the cloth from G to A. With flannel the result is given at H, showing that very little heat has passed through the woollen material. An equal thickness of silk is now substituted, with the result shown at I, and although the iron has by this time probably got much colder, an equal thickness of cotton or linen allows so much heat to pass that the liquid is driven high up the tube, as shown at K, and not unfrequently forced into the funnel at the top.

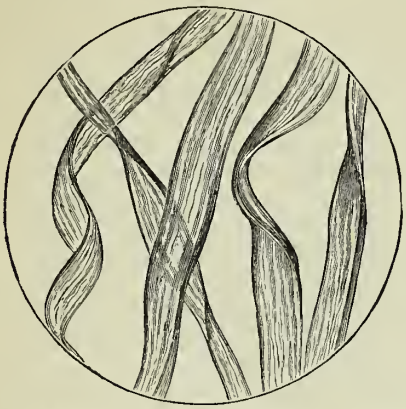
We have taken it for granted that none of the fabrics used were coloured. Let us now take a piece of woollen cloth, dye one portion red, another blue, another yellow, and beginning with an undyed piece, we shall find that, so far as the obscure heat with which we are experimenting is concerned, colour is a factor of not the slightest consequence; the same amount of heat being shown to pass through each of the four pieces. But although the colour of our clothing is immaterial so far as keeping in the dark heat of our bodies is concerned, when we come to consider the action of luminous heat, such as that of the sun, we find colour is a very important consideration, as shown by a number of experiments with the same cloth of different colours. The amount of



MICROSCOPIC APPEARANCE OF FIBRES OF SILK.

heat received was measured by a suitable apparatus, and taking white as the standard with 100°, dark yellow showed 140°, dark green 168°, light blue 198°,

and black 208°, or expressed in words these figures mean that any one exposed to the sun would receive twice as much heat in a black dress as in a white one.



MICROSCOPIC APPEARANCE OF FIBRES OF COTTON.

Thus for summer wear light-coloured garments are the best. On the other hand, the colour of our winter clothing is practically immaterial, for although black would of course be best in the sun, the solar rays are then so much enfeebled, and the sun himself so often clouded, that our sole concern at that season is the keeping in of our bodily heat.

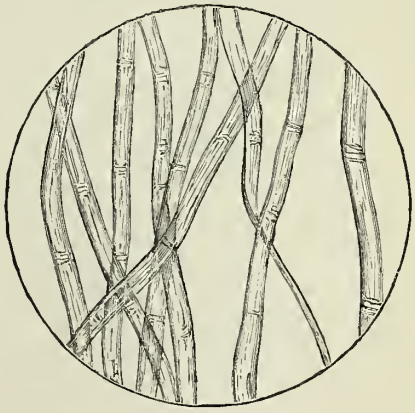
But while colour then goes for little, material is of the first importance. We have shown the difference between the conducting properties of wool, silk, linen, and cotton; but not only is wool the best in this respect, it likewise holds the first place in regard to ventilation; for, strange as it may appear, those materials which up to a certain point allow most air to circulate through them, keep our bodies most comfortable. Wool, which stands highest, allows 100 parts of air to pass, while silk under similar conditions allows only 58, linen 40, kid only one; and waterproof garments, so well known as close, uncomfortable, and unhealthy, give about the same figure.

We must now very briefly touch upon another point, which indirectly influences the character of clothing materials by diminishing their ventilating properties. When one perspires much after severe exertion, or when exposed to great heat, if wearing cotton or linen next the skin, these fabrics soon become wet, cold, and uncomfortable, whereas with woollen underclothing and the same amount of perspiration we scarcely feel any of these effects, the reason being that wool absorbs about twice as much water as cotton before being saturated. Linen behaves in this respect just like cotton, and as the liquid so absorbed is retained in what we may call the pores of the cloth, it is thus evident that in the case of these vegetable materials ventilation soon becomes impeded or completely stopped; and as they become much better conductors when wet, and carry off so much more heat from the body, they are thus ill adapted for use next the skin.

The reason for such a difference in the absorptive properties of these materials is to a certain extent explained by the character of the cloth; but it is only on becoming acquainted with the microscopic structure of the component fibres that we can fully appreciate the distinctive characters of these fabrics. Under the microscope the fibres of flax and cotton appear as long flat bands, so that a number of them together lie quite close, and with but little interspace; silk and wool, on the other hand, have both cylindrical fibres, and in wool there is a peculiar imbricated structure, something like that on a fir-cone externally. If we suppose a long smooth cane, without the joints, to represent a greatly exaggerated fibre of silk, the same cane notched all over would give some idea of what wool is like; and if we were to split up a cane into long thin flat pieces, these might be regarded as illustrative of the structure of cotton or linen.

If we consider how much less closely the round threads of wool or silk can lie together than the flat fibres of flax or cotton, we can readily understand why the absorptive powers of the latter are so much inferior to those of wool, the matted threads of which can take up and retain by capillary attraction a wonderfully large amount of water. But in addition to these many excellencies, the value of wool, especially for underclothing, is still further enhanced by the healthy friction which it exercises on the skin, helping to remove or brush away excreted matter, which might otherwise accumulate and seriously obstruct the pores, and this it does doubtless in virtue of these scales or imbrications, microscopic though they be. There is thus every reason for urging that woollen garments, thick or thin according to the season, should constantly be worn next to the skin, for although silk is no doubt almost as suitable for underclothing, owing to its much greater cost it can never come into general use for such purposes.

We have thus briefly sketched the leading principles which ought to guide us in our choice of the materials available for clothing. The errors we commit in dress are numerous, but of recent years the potent influence of common-sense has exterminated not a few of these abominations, and the rapid spread



MICROSCOPIC APPEARANCE OF FIBRES OF LINEN.

of knowledge makes us hopeful that before long an intimate acquaintance with the science of every-day life may be within the reach of all.

ON OVER-DOING THINGS.

BY A FAMILY DOCTOR.

"THERE'S a midst in a mire," say the Scotch, and there is, as far as I know, hardly a nation on the face of the earth that does not cherish a saying much to the same effect. There is a mean we call golden, by which we should measure our actions, and which should be our guide in our journey through life, if we would steer clear, as far as possible, of the numerous ills incidental to our nature—in other words, if we would enjoy perfect health.

Now the questions which always occur to me when sitting down to write my monthly paper are—first, "Who are the people whom I wish to address?" and secondly, "Who are they who are likely to read my article?" The answer to the first question to-day is this:—

"I wish to address those who are still, to a great extent at all events, in the vigour of health."

And I must tell them at once, that the good that may accrue from a perusal of the present paper is more prospective than immediate.

But, alas! the answer to the second question is:—

"Probably the very people I wish to address are those whose ear I may not reach."

These may throw down the Magazine, or pass over it with some such remark as "Oh! that will keep till a more convenient season," so unwilling is any human being to take time by the forelock in order to prevent future illnesses. That prevention is better than cure, every one is perfectly willing to admit, but then the very work of prevention—that is, the living in obedience to the laws of health—seems so troublesome and irksome to many of us, that we much prefer going on living careless, reckless lives, and riding our hobbies to death, or until they get so worn and useless that they will no longer bear us.

The title I have chosen may frighten some of my readers: it is a strange one, not perhaps a very taking one; but it must be remembered that there is many a good nut within a ragged shell and rough, so I may have something good to say after all. And now, before proceeding further, let me try to correct an impression which I *may* have made on the minds of some by something I have said in a sentence above. I have in that sentence connected the words "living in obedience to the laws of health," with the adjectives "troublesome" and "irksome." But I do not mean to imply that living as one ought means constant and perpetual mortification of the flesh. Still, take the case of a man who at the ripe age of, say, forty, finds himself in somewhat failing health. All his life he has been living free and easy, never denying himself anything his inclinations pointed to as likely to contain an atom of pleasure. He has been guilty of excess in many ways—he did not err through ignorance, however. Perhaps he had a blind faith in the strength of his own constitution—often a fatal mistake—perhaps he had a blind faith in the curative capabilities of the medical profession, thought they could work miracles, and said to himself, "I'll be happy and jolly as long as I can; when I do fall ill, I can call in Dr. So-and-so—he'll put me to rights very soon." But by-and-by it has dawned upon him that, after all, there *might* be a right way and a wrong way of living, that it was within the bounds of possibility that the virtuous might be just as happy as the vicious. The thought gaining strength, and prompted probably by the pleadings of an over-worked liver which groans in every lobe, he resolves to turn over a new leaf and live by rule. He does not do things by half-measures, he forsakes his old haunts, he forsakes his boon companions, in a word he "goes in" for living as one ought who values health. Having taken hold of the plough, he is too brave to look, far less turn back, and so in a few weeks he finds himself wonderfully improved in health. But then comes a period of reaction, and he is fain to cry out with Charles Lamb, "What have I gained by health? Intolerable dulness! What by early hours and moderate meals? A total blank!" It will be well now for this man if, in spite of feeling it troublesome and irksome, he keeps boldly on in the "midst of the mire;" if he returns to wallow in it like the pig that has been washed, his last state will be worse, by far, than his first. If he does keep on though, if he can maintain the courage of his convictions for only a short time, he will no longer find it irksome—living aright will have become a habit—oh, happy habit!

Let me now say a word or two about some of the things which people often over-do, to the detriment of their health and comfort.

Work, whether mental or physical, must be performed, if not by all, at all events by most; and the happiest man is he who has work to do, and is spared in health to enable him to perform it. But there is work and there is over-work, and on the other hand, there are two kinds of over-workers. The man who has to *toil* at his work to support himself and family I honour as a martyr, but, at the same time, pity as I would one suffering from an incurable disease. And the man who toils and over-works for the mere sake of the over-weening ambition of being richer than his neighbours, I despise as I do a gambler, and only pity in the same way as I pity a suicide. Work with a will by all means, work honestly and cheerfully—it is work that keeps the nation where it stands—but do not over-work, however much you may be paid for it; else a time may come when, old before your time, all the money in your coffers will not purchase you an hour's freedom from pain, nor bar by a minute the advance of the grim destroyer.

From work to exercise the transition is easy.

Work itself is sometimes exercise, it is sometimes mere play, but exercise to do any good should never partake of the nature of work. As soon as it does, weariness and fatigue step in, and for the moment the constitution is broken down, so to speak. Nor can it be restored to its former strength until a sufficiency of rest is taken. But, surely, exercise that not only craves for, but makes it imperative that rest shall follow, is worse than folly. Time has been thrown away and mischief done, therefore exercise of this kind is taken to no purpose.

As I have said before, exercise that is unpleasant is only deleterious; it is not true exercise; it is as different from true exercise as two hours on the treadmill are from two hours spent in climbing a mountain to gaze upon a summer's sunset. Probably the truest kind of exercise any one can take, is that obtainable from his favourite out-door game. What a noble, healthful pastime is our national game of cricket! and the same may be said of lawn-tennis, at which even ladies play. If there were more play-grounds in our country for adults of both sexes, there would be far less sickness and far less vice and crime.

But to over-do exercise is, as I said, great folly, and yet how often is this not done? I will only mention two kinds of exercise which are too frequently over-done, namely, walking and bicycling—and the latter especially. A bicycle is a very pretty present, and many times a most healthful one, to make to a young man; but if he is delicate and over-rides, it is easily seen that it may be positively injurious. The possession of such a machine is, it is true, an encouragement for him to get away out from the smoky city, in which he might find means of spending his money and holiday hours in ways not conducive to longevity; but if he makes too long journeys, the returning is sadly wearisome work, sadly fatiguing, and sadly provocative of refreshment stronger than the usual soda-and-milk. To say nothing of that, to say nothing even of the languor and fatigue felt on the day following too long a ride, I cannot believe that the practice so common among 'cyclists—whether *tri* or *bi*—of rushing hills, especially when in parties, is otherwise than most trying to the lungs, and therefore to the heart. Parties of 'cyclists go out together, and among them may be one or two athletes: it is not painful for the latter to rush the acclivities, but the weaker go to the wall. They feel a pride in keeping up with their leaders, a pride that unhappily may at some future day be productive of attenuated right hearts, or hypertrophy itself. Spurting on a bicycle or tricycle is worse than the spurting of rowing, for the simple reason that rowing men are usually put in training for the work they have before them.

On athleticism I will not give an opinion at present, as I may take up the subject on some future occasion, but moderate, pleasure-giving, regular open-air exercise is a wonderful health-restorer. Try it, ye who never did. By the way, if exercise is ever taken soon after a full meal it should be of the gentlest, say driving or sauntering, but nothing that entails a bending up and down of the body. "Why?" you ask. Because, intelligent reader, it excites the stomach too much—irritates it, almost—causes it to throw out more gastric juice than is required—hence acidity, and perhaps an attack of indigestion.

I have no wish to rush the hill of intemperance in either eating or drinking, though I do sincerely believe that the former is to blame for a good deal of the latter. But if people only knew how much better they would be by partaking of less food, and how much greater a chance of long life it gave them, there would be far fewer gourmands and epicures in the world. By over-eating one renders himself less calm, and consequently less happy, more nervous, because more excitable, and therefore on the whole less able to conduct the business of life and gain what the world calls fortune. But there—I really am "rushing" the hill of intemperance. I'll dismount at once, and get on to easier ground.

There are few greater admirers of the *bath* than I myself am. I like almost every plan of bathing—with the exception, probably, of the Russian moudjik plan of getting in under the stove, and burying yourself in hot ashes. I have never tried that, but doubtless it has its advantages—to a moudjik. However, I must say there is such a thing as over-doing even the bath. Although I should wish that every one in this country were like myself—amphibious, so that if thrown into the water he would only ponder, while quietly swimming out again, where the nearest place was at which to procure dry clothes and a cup of coffee, still it must be remembered that men are not manatees. We could not live most of our time in the water, like those interesting aquatic mammals. People should neither bathe too often in the day, nor remain too long in the water at a time, else they will over-do it, they will have too much of a good thing. The after-effects of the bath should in all cases be studied, as well as the state of the general health. Moreover, the temperature of the water deserves consideration: it may suit some people to break the ice on their matutinal tub in winter, with a frozen sponge for a mallet, but a dash of warm water is to be recommended when the mercury crosses the line 32°. One bath in winter, and two in the heat of summer, I would call not over-doing the thing.

People may over-do, to their detriment, the most simple things. A cup of good tea or pure coffee is a simple thing, but over-indulgence in either is most hurtful. Probably I ought not to have classed tea and coffee together, because in my humble opinion there is much more harm done by drinking tea, than coffee with plenty of milk. At the same time, taken in moderation, and when free from adulteration, either is good. The upper classes in this country often over-do their amusements, and so do the middle classes when rich and idle. Too much amusement palls upon the adult mind, as too many sweets do on the stomach of a schoolboy; but a case of boyish dyspepsia may be summarily treated, not so a case of genuine *ennui*. This disease has not as yet found its way into our nosological tables, and yet it is as little a compound ailment as hundreds to be found therein.

It is a disease of utter nerve prostration, and deterioration of brain power, and even muscular energy. Any one suffering from it may be roused, it is true—so may a dying lion—but it is only momentarily in either case, relapse is sure to follow. *Ennui*, if not cured, may lead either to insanity or death; the cure is usually difficult to accomplish, for it must be in every way radical; and, besides, the patient is generally too listless to care whether he is cured or not. As often as not, he seeks to cure himself by flying to stimulants. Then the end is certain.

I ought to say a word on the subject of clothing. This is one of the things that are greatly over-done. I do not refer to dress at all. I have nothing to do with fashion, except perhaps to condemn the habit of over-tight lacing, and wearing uncomfortable boots and shoes. But the one great fault people commit is too much wrapping up, in-doors and out, by night and by day. Colds are often taken by day, but very often the seed has been sown the night before. The body has been kept too warm, and so enervated; there may have been a fire in the room, the windows may have been closed, and too many bed-clothes worn.

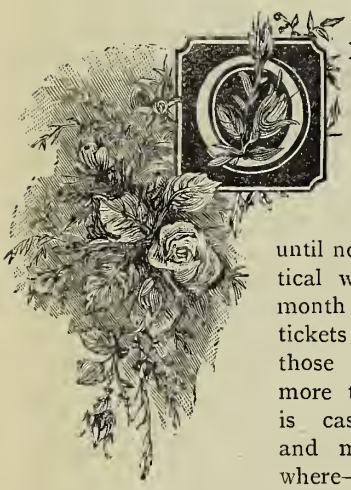
Probably there are as many people die during the year, in England, from the evil effects of over-clothing as from cold itself. Hot, stuffy bed-rooms largely increase the annual death-roll.

We should dress each day according to the weather and temperature. The idea of summer and winter clothing is very absurd, with the month of June so often a sneak, and July an arrant humbug. Never trust either of them farther than you can see them—they both want watching—and the worst of it is, the other ten months are not a whit better. Rough and all though it be, January is generally the most honest month of the twelve.

How many of us meet our deaths, I wonder, in a single year by over-doing physic? Not by over-doses, but by constantly flying to medicine with every trifling ailment! People may guess—although it is usually only a guess—the kind of medicament they need, but they err by taking it at a time when they would be infinitely better without it. A medicine-chest is a capital thing to have in a house, but in nine cases out of ten it is far better when the key can't be found.

One other thing which may be over-done is a man's subject. Lest, therefore, I commit that error, I close it.

GARDENING IN OCTOBER.



ONLY too rapidly are we once again parting with what little is left to us of the summer. The Londoner who has not been able to get away until now, tells us in a practical way that it is the last month for which "tourists' tickets" are issued, while those with whom we have more to do, and whose lot is cast amid shady lanes and more peaceful scenes, where—

"All the air a solemn stillness holds,
Save where the beetle wheels his droning flight,
And drowsy tinklings lull the distant folds,"

tell us that those shady lanes are daily becoming more musical with the crisp footsteps of the eddying leaves than with the joyous notes of the birds, who are just now only the auditors of a quaint duet between the "dignity and impudence" of their feathered tribe—cock-pheasant and cock-robin. It is unjust, however—not to say fruitless and senseless—to be always complaining of the weather and the seasons. No one can say that we have had no heat, no summer, in the months that are past. It is, we believe, now on record that on one occasion in the month of July last our thermometer in many places stood actually higher in the shade than that of Madras or Bombay! Our hay for the most part was got in well, save where in some localities a drenching thunderstorm made havoc of it; but now it is October, and we are already beginning to think gravely of our last autumn and our last winter; nor have we forgotten, first of all, that singular phenomenon, about this time last year, of the early snow-storm which weighed all our trees down, with their foliage yet thick upon them; and when those who were walking immediately afterwards through any woods or forests in the south, heard ever and anon a sharp report like the crack of a rifle, caused by the sudden snapping asunder of the overladen boughs and limbs of our giant oak. For it is upon the oak that the foliage remains the longest, and the oak, therefore, at that time suffered the most. But we have more to do in the garden than with the forest, and in this time of the year—the first month when we begin to carry out any extensive alterations in our shrubberies—we see to our sorrow that there are many blanks to fill up, as so many of our evergreens were killed outright last year by the intensity and severity of the winter. We would suggest, then, that when application has to be made to the florist for a few shrubs to replace those that are gone, the very hardiest kinds be asked for. We shall hope, however, that our evergreens, and some other trees and shrubs that appeared to be killed, were not too hastily removed in the spring or summer of the year that will soon be fading from us. Those who watched more narrowly the state to which they were reduced must have remarked that many shrubs which in the month of February or March we took for dead had got the principle of life in them in many places. The absence of rain, too,

during the spring, and the prevalence of those long, cold, east winds in the month of May, kept everything back, and even in the south it was not until June that we saw some of our laurustinus, Portugal laurels, &c. &c., breaking out into leaf again lower down, along their dry-stick limbs falsely called these last two years "evergreen." In many places the frost appears to have killed the top six inches of most of the exposed boughs, while lower down, or along the stem itself, a more practised eye would notice, as we have just said, that life was not actually extinct. The writer of these pages was sadly interested this year in noticing the pranks which the frost had played on a noble fig-tree of his own. The tree looked due south, and was sheltered from the north and north-west by the side of the house, while it was partly sheltered from the east as well by the projection of a green-house; yet this tree—a most prolific one hitherto—was almost wholly destroyed. For a foot or so above the ground, however, it broke out again in the early summer, and bore a few figs along its lowest arm. This month, the whole of the upper part of it will be cut away, and in due time it may yet recover itself. The fact is, during last winter some of our most intense frosts came with the wind



in the south-east. The rhododendrons, and bays too, suffered largely. A correspondent also called our attention to the curious fact that rabbits last winter committed "unusual ravages by nibbling not only at the stems of trees, but at the branches also, since the heavy weight of snow bent them down within their reach, so that good-sized ash-trees, elms, and sycamores, &c., had in many places been stripped of their bark ; and that as each successive fall of snow enabled the little depredators to reach higher up the hedges, many were peeled quite up to the top, and of course, killed." This fact, then, gives us a hint for our gardens, where, it may be, we fear, more damage might accrue to our evergreens from the weight of snow than from rabbits. A quick turn over the garden with a pair of snow-boots on, and a long pole or broom-stick in hand, will enable you to give a gentle tap or two to some well-laden bough and relieve it of its weight of snow. The writer of these pages saw a number of standard roses last autumn just saved in time by this very simple and common-sense process.

This, then, being the month *par excellence* for shrub-moving and heavy alteration in our garden and borders, we might with advantage briefly notice the properties of a few evergreens that it may be desirable to plant out now, and for which we expect there will be about this time a very considerable demand. Now, a garden brightly and judiciously laid out with a few good hardy evergreen shrubs greatly facilitates us in carrying out our intention of doing away, in part at any rate, with that terrible bedding-out system, so that even in winter there is a certain freshness instead of dreary desolation about the garden.

Take first, for example, the holly—a hardy fellow who does not mind a good amount of frost ; for do we not associate it pre-eminently with our Christmas and festive decorations in December and January? Now, did we choose no other evergreen save the holly, so variegated is its foliage, and so many are its varieties, that we never need be at a loss for the beautifying of our garden with evergreens : some, for example, of its leaves are light and some dark ; then there are the narrow and broad-leaf varieties, smooth and prickly, or with edges and centres variegated, yellow and white, &c. In a somewhat wild and overgrown garden, the writer noticed recently a tall and noble holly-tree with which had been cruelly allowed to grow, in one huge entanglement, a blackberry-bush as high as the holly itself. The proprietor used laughingly to observe that he would not have the blackberry cut out, as the fruit, especially at the top, was very fine, and out of the reach of the boys, unless aided by a ladder. But the winters of 1879 and 1880 proved at length too much even for the blackberry, and it succumbed to the cold, while the holly still flourishes, terribly disfigured, nevertheless, by the dead arms of the blackberry, which it is a most difficult process to attempt to remove from its prickly companion. The florescence of the holly is a poor object ; but as it is in bloom at a time when our gayer flowers are also delighting us, this is of little consequence. Its berries, however, of bright scarlet or lemon colour, are familiar enough to us. No evergreen bears the knife so readily as the holly, and it is not an uncommon thing to see a holly-tree clipped in various devices representing a dog or a bird—a barbarous and unmeaning practice, in our opinion.

Side by side with the holly, and in charming contrast with it, can be planted varieties of the yew and the pine. The pinus tribe, however, is beyond our management by pruning ; its elegant shape needs no description. It will be impossible for us to do much more than barely enumerate or suggest a few other evergreens for our garden planting and alterations during this month. There is, for example, the arbutus, an elegant shrub whose fruit resembles an oval strawberry. Some of its varieties when in good soil grow rapidly. Then, of course, we can have the laurustinus, the rhododendron, the laurel, and Portugal laurel. As for the laurustinus, one great advantage in it is that its foliage feathers, we might so say, down to the ground, and it is thus an admirable shrub for shutting out a kitchen garden view—not that we intend ever to be ashamed of having a kitchen garden ; an outhouse, however, or anything unsightly, in fact, can be well concealed by the laurustinus. It bears pruning well, and its foliage is always best when it is in flower ; and as it is the winter season when this is the case, we value it accordingly. Who cannot recall, at the very dead time of the year, perhaps, cutting off a few bright sprays for table decoration—not certainly for the sake of its scent, which is decidedly bitter or rank, but for its appearance ? And these few sprays, interspersed with one or two far more rare fragments of geranium, culled from the green-house, do their best to make us believe that summer never really leaves us. Far contrary in scent, however, is the Portugal laurel, which blossoms about June, and fills all the air with its almost too luscious fragrance. Alas ! for the poor Portugal laurel ; it suffered terribly last winter, and we would recommend purchasers of it to find it a more sheltered situation if our Arctic experiences are to be renewed later on. And in contrast, again, with the dark bushy foliage of the Portugal laurel is that of the common laurel, with its pale yellowish-green leaves. A couple of these, say near each corner of the lawn, are very effective and ornamental. Remark their foliage, even in the worst of weather, when the snow is on the ground. It is a great relief for the eye to rest upon in that forlornest of forlorn sights—a deep snow. When we just now said that no evergreen bears the knife so readily as the holly, upon second consideration we should perhaps have given the palm to the box, which, like its friend the yew, can be cut into any fantastic shape. The box is very hardy—a great consideration for us in our present anxiety as to the future of some of our evergreens. But we must not allow this engrossing subject of the new shrubbery, which, nevertheless, very properly and opportunely occupies our attention this month, to carry us away from our fruit, flowers, and vegetables. The drawback certainly to an extensive

alteration in the garden is that we are, of necessity, so much taken off from other branches of horticulture whose needs are unhappily almost as pressing.

There are our dahlias to be lifted and dried in our outhouse, stem downwards, otherwise we are liable to let the crown rot and decay. Our roses have certainly nearly done their work. We generally find that a careful picking off of the faded flowers and an occasional gathering of some for table and drawing-room ornament help the standards to go on blooming longer than they otherwise would. Some gardeners seem afraid to clip away these long heads of summer growth on the roses; but really to allow them to remain on, more especially where their length is extravagant and unsightly, runs a terrible risk of allowing these long arms to be torn away much lower down, and in a far more violent manner, by the gales that we generally experience at this season of the year. The chrysanthemums, too—one of our final hopes for flowers—will want constant attention when they are on the point of coming into bloom. Those that are in pots should be placed at once where they are intended to bloom. Those that you intend to flower in the open air had better be plunged—that is, have the pots themselves inserted in the earth—as this saves the roots. Any that seem to show no desire to flower, or to flower very indifferently, had better be cut down, and from any that have been damaged by early frost remove the bloom-stalks. Those that you have in pots in your greenhouse should be carefully watered at times, as the bloom will be impoverished if any scarcity of water is permitted just at this time.

And then in our kitchen and fruit gardens we are also busy, carefully gathering and storing our apples and pears. We need hardly repeat what is so commonplace, that dry weather must always be chosen for this operation, and that on no account must the fruit be bruised. Walking so much over our beds just now, we shall postpone, as is more usual, for that reason all our heavy trenching and such-like work until next month. But we are very busy just now, for the increasing supply of fallen leaves gives us such a constantly untidy appearance. Yet in a comparatively little time this also is a thing of the past, and our now naked trees allow us to hurry away to another part of the garden.

A SWIM FOR LIFE: A WESTERN EPISODE.



"SAY, stranger, there's something wrong yonder, ain't there?"

Thus spoke a rough-looking miner on the outskirts of the camp to a Mexican who was walking hastily past. The stranger understood but imperfectly the remark addressed to him, but replied, "Horses stole," and proceeded on his way, his long spurs jingling at every step.

The miner looked after him anxiously, and when he had disappeared down the hill, turned towards the saloon, muttering something about horse-thieves and hanging, and strolled, or as he would have himself said, "loafed" into the bar, where an excited assembly was gathered.

"Wa'all, they're gone clean away," cried the owner of the missing animals; "and my hosses nor donkeys don't stray by nature. There's bin some thieves around, you bet!"

"Like enough; but who's the man? Howsomever, if we ketch him, gentlemen, we'll shoot him fair."

"Give him a trial and rope him—that's the cure," said the owner. "And now tew business. My treat, gentlemen. Drinks round, and then I'll follow the tracks a bit, and let you know."

Such an offer was not to be slighted. The "drinks" having been fully appreciated by all present, at the expense of their health and brains, the owner of the missing beasts departed to follow the trail, which led towards the cañon up the river.

Ogden Smith, or "Soft" Smith, as he was not unusually called, had that very morning taken his horses to water down-stream, and left them in a safe place pending their disposal. Ogden had been unfortunate in his prospecting. He was neither quick-witted nor quick-tempered, though ready enough with his six-shooter when circumstances seemed to warrant its use. But for this trait, "Soft" Smith would have been stamped with a strong variation of the term "idiot."

He followed the tracks mechanically, and after about half a mile, finding they still led up towards the hills, he returned; and as he strode back, breathing vengeance against his spoilers, he noticed human foot-prints on the farther side of the trail—heavy boot and spur marks. He felt inclined to track these again, but knowing the trail would lead to the river, then flooded with melting snows, he decided to return to the camp and enlist the vigilants in his cause.

It has never been correctly ascertained why horse-stealing was then, and may be still, regarded as a worse crime than the taking of human life; but that this

was the case in the West is undoubted. Many a rough digger was permitted to add to the notches already cut in the pistol-butt, but a horse-thief was hunted down and executed summarily.

Notwithstanding a gathering storm, the men in the saloon, as soon as they heard Ogden Smith's report, determined to do vengeance on the criminal. The sufferer, meantime, met with much sympathy, and "dust" (gold-dust, which passed for currency) was freely shaken into Ogden's hat in the bar-room. The discussion as to who the thief might be was waxing warm when a voice cried—

"Reckon some Mexican's had a hand in this game."

This suggestion was at once adopted, and Bill the miner said—

"Aye, then I can show him. I saw him on the hill above this morning. Did ye notice any tracks?"

"I did," replied Smith eagerly. "Large boots, and spur marks too. That's the man!"

"We'll go for him. Who knows his place?"

Several present did, and one man added—

"He's a mighty quick shot, you may depend."

"We're more of us than him," was the answer of the leader. "He can't fix us all. Now, gentlemen, we must proceed reg'lar. 'Panel a jury, if you please; but there is no use in wasting time."

The jury was quickly chosen, and in order to avoid unnecessary delay, horses were brought out, and the whole party rode through the driving rain and tempest to the Mexican's hut.

The door was burst open, and before the surprised occupant could use his weapon he was seized and bound, and thrown helpless on the floor. Before he was disabled, however, he managed to seize and retain a small knife, which he thrust into his sleeve.

To his questions he got but scant replies. The jury were ushered into a small shed, and told to deliberate upon their verdict, after a few questions had been put to the criminal, who protested his innocence.

One bystander, more humane than the rest, volunteered to act as prisoner's advocate, and addressed the jury as a matter of form, for he knew the stranger's doom was sealed.

After a pause the jury again retired; and in a few minutes the self-appointed judge, knocking at the door, asked for the verdict. To the astonishment of the bystanders, the answer was, "*Not guilty!*"

A cry of joy escaped the Mexican; an exclamation of disappointment was vented by Ogden Smith. But the judge drew his revolver, and beckoning to the committee, replied calmly—

"Gentlemen, you'll have to do better than that.* Try again; and this time attend to the evidence."

He handled his pistol menacingly as he spoke, and the jury retired again.

They were not long left undisturbed, for time was passing, the tempest was increasing in severity, and the committee had some distance to ride that night. In five minutes the judge again called them, and this time the obedient twelve gave the verdict "Guilty!"

"Quite correct," said the judge; "I approve. It's a verdict. Carry out the sentence, yew," he added to two of his associates. "And now, gentlemen, I think we've done our duty; the hosses wait. Hev ye anything to say?" he inquired of the criminal.

The poor man pleaded earnestly for mercy, and protested his innocence wildly, but it was useless. The majority of the party then left the hut, and the two men, placing their unhappy prisoner astride a mule, unbound him, except for a turn of the rope on his left wrist, and walked beside him to the place of execution. There his outer clothing was taken from him, and his boots—those fatal witnesses—laid aside. He was then fastened to a tree. The place of execution had been well chosen. It was a low point jutting out into the river, just above the rapids. The current was running swiftly, swollen by the melting snows and the tremendous rain which was still descending in torrents. From this point the river descended rapidly. Higher up, but then obscured by the thickly falling rain and mist, was a high ridge, which projected across the river and formed a sort of bowl-like enclosure, in the centre of which was (and is) a small wooded island. Below this eyot the river divides. It becomes narrower, and passing on the right side over a small rocky breakwater, or natural barrier, it takes a tremendous leap sheer one hundred feet over the rock, spreading out from the base for many feet in its descent. On the left side of the island the stream has worn away the rock to a great extent, and on that side the water hurries down a rapid at a steep angle, and at the bottom meets deep water, which drives in a swift current over to the right shore, to a strip of beach on low ground—a watering station for animals.

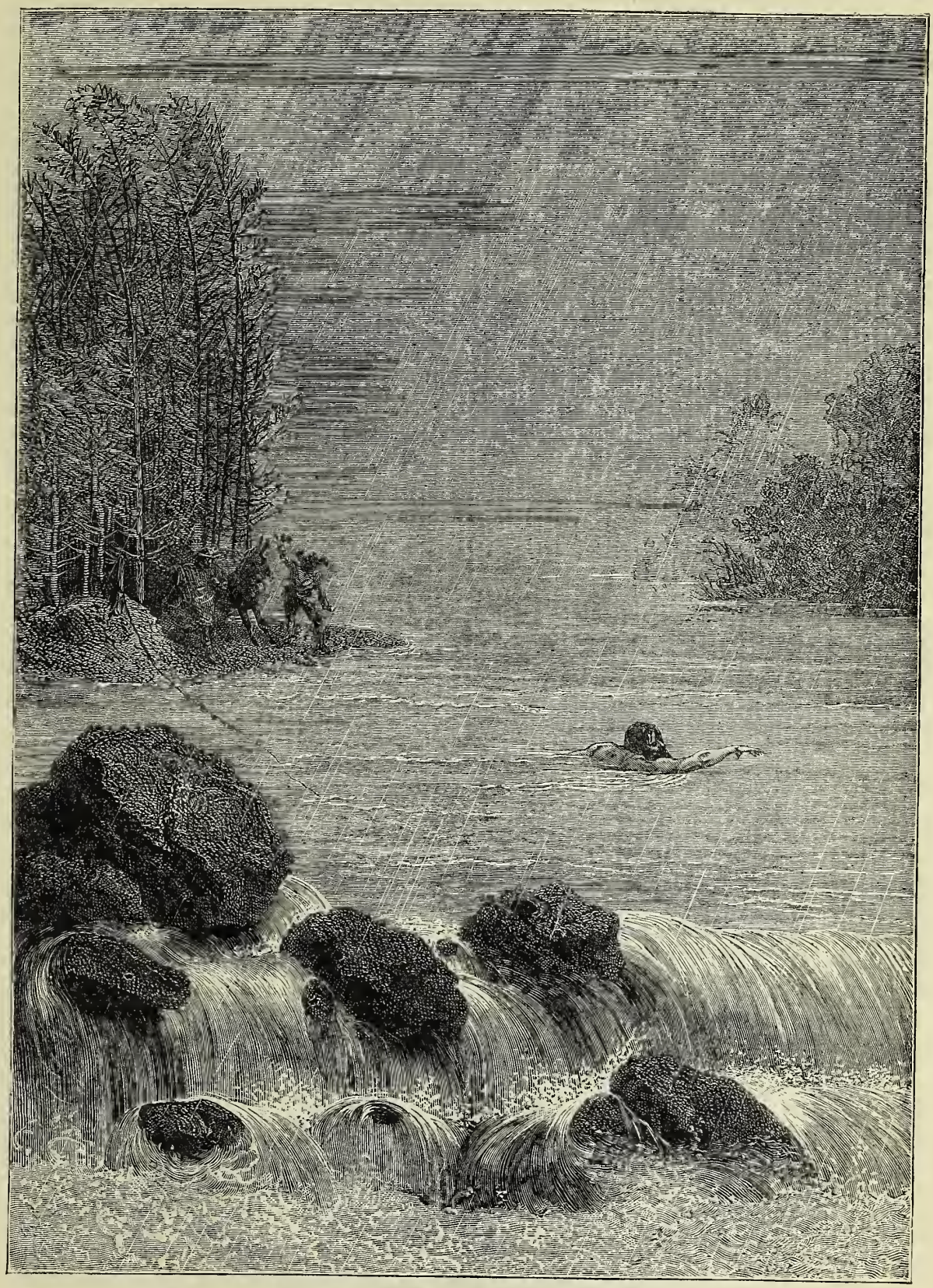
The men charged with the execution had well chosen the place. The prisoner stood with hands clasped as one of his guardians was making preparations, and the other stood ready to fire should the prisoner attempt to escape. One was adjusting the cord upon a neighbouring tree, underneath which the mule had been already led, when an exclamation from him made the other guardian turn his head. The quick-eyed Mexican seized his opportunity. With a swift sweep of his right hand he severed with the concealed knife the rope at his wrist, and with a desperate backward spring he threw himself into the eddying, boiling river.

The heavy splash was the first intimation that the other men had of the Mexican's escape; and, with revolver ready, one waited till the swimmer should reappear. He rose, and struck out boldly for the opposite shore. The man raised the pistol, when his companion stayed his arm.

"Give him a chance, Bob," he said. "You or me may want a good turn some day; and besides, I don't b'lieve he lifted them animals. Soft Smith's an idjit."

"Well, mebbe yer right," replied the other, as he returned his pistol. "Poor chap!" he added, with a touch of feeling to which he had long been a stranger. "Poor chap! the fall will save us the job, anyhow."

* A fact.



"HE ROSE, AND STRUCK OUT BOLDLY FOR THE OPPOSITE SHORE" (*p.* 692).

"He's gone!" replied the other. "He can't git over, eh?"

"You bet!" exclaimed his companion. "He's right enough, I do declare; he'll git out now!"

Meantime the unfortunate fugitive was struggling vigorously to gain the centre of the stream. He was swimming strongly hand over hand, and every now and then he cast a glance at the ridge of rocks that fringed the rapid leading to the fall of a sheer hundred feet. Could he clear this he might be saved. He was making good way, but ever being drawn nearer and nearer by the resistless current to his destruction. The men on shore watched his progress with feverish anxiety. Another yard or two and he would gain the rocky ledge which ended the fall and where the less dangerous rapids began. Would he last?

The men clasped hands in their strong excitement, and by a simultaneous impulse cheered the swimmer on. The poor wretch heard it. It gave him courage. One minute more and he would be clear; with renewed energy he strove, and with a despairing effort clutched the rock. His legs swung for a second into the milky mass of water above the cataract. Could he bear the strain? A cheer from shore: a mighty effort—he swung himself over, and with a long sweeping stroke dashed down the rapids and disappeared.

* * * * * *

The men turned away, breathing more freely, and returned as hastily as possible to camp to report. The storm still continued; the river had run up the creek, and it was nightfall ere, wet to the skin and chilled to the bones, they gained the saloon. Here all was confusion; twenty tongues speaking at once, and all condemning "Soft Smith." The "judge" was present, and as the two men entered he said, "I'm kinder sorry we hanged that Mexican. We've done him an injury, boys, I'm afeard."

"Save trouble in the end, mebbe," said another. But the judge shook his head.

"What's the matter?" inquired the late comers.

"Why, Soft Smith's a fool. He's found his beasts safe at home, where they went o' themselves, having broke halter. The tracks was the Mexican's tracks, but only to his own location. We've done that man a wrong, and I'm ready to apologise; I can't say fairer. Here's his health!"

A voice from the doorway replied, "I drink to that!" and as all eyes were turned in the direction of the sound, a ragged, half-naked form, the limbs bruised and bleeding from deep scratches, walked up to the bar. Terror sat upon every countenance. The visitor was the Mexican.

"Didn't ye—didn't ye hang him?" gasped the sturdy but superstitious judge to his deputies.

"Guess not," replied one of the pair addressed. "He slipped into the river and swam across the Cataract Rapid."

"Thunder! but I'm glad. Here's my hat, boys; fill in your dust now, and let him have it."

No second bidding was needed. Very soon the heap of gold-dust had reached a goodly pile, to which Soft Smith was a most liberal contributor.

Ogden Smith was considerably laughed at, but the Mexican was regarded as a hero, and prospered. The camp in time was broken up, but there are many still alive who remember that swim for life across the Small Snake River.

H. F.

A WITHERED ROSE.

WE lingered in the meadow croft;
We saw the summer moon aloft
In silver light: the earth, the sky
Were not so full of peace as I,
Whose days have lost their tranquil tune
Since love can die so soon, so soon.

He plucked a fragrant rose, and there
He set the blossom in my hair,
And clasped me close, and whispered low
Of changeless faith, which now I know
Inconstant as the changing moon,
Since love can die so soon, so soon.

The nightingale was warbling clear
In liquid notes: I did not hear
The witching music of the bird;
His vows of love I only heard.
O sad and sweet that night in June!
Since love can die so soon, so soon.

I keep the rose, whose darkened hue
Recalls the joy which once I knew,
That gathered colour day by day,
And brightness, till it fell away,
With hopes like faded petals strewn,
Since love can die so soon, so soon.

I keep the rose: the time may be
When I with firmer heart shall see
Its withered leaves, nor sigh to find
In life's calm eve new peace of mind,
Though clouds obscured its early noon,
Since love can die so soon, so soon.

J. R. EASTWOOD.

WHAT TO WEAR.

CHIT-CHAT ON DRESS. BY OUR PARIS CORRESPONDENT.



THOUGH we are living in the subdued sunshine of autumn, great are the preparations for winter. I have just seen a fair show of woollen goods. Both foulé cloths and Estamene serges are to be worn still, but there are novelties in colouring, mostly in the direction of dark reds and violets. In Vicunas, some well-arranged useful dresses are made of the new herring-bone design in speckled greys and heather mixtures. Chuddah cloths have been prepared in large quantities; and provided the quality is good, my readers cannot well do wrong in selecting these: they are so soft that they fall in the most graceful folds, and are really durable. Fantaisie cloths and Vicunas embrace a large number of useful stuffs in plums, blues, and greys. Many of the common tweeds have tiny stripes in a mixture of shades and shaded stripes. Black cloths are to be worn out of mourning, especially black Vicunas. They will have no trimming but tortoise-shell buttons, with the wearer's monogram engraved.

There is a marked improvement in the habit cloths, also used for dresses; they are well shrunk, and more attention is now paid to their finish. Borderings are decidedly the fashion. Both serge and diagonal cloths are made with fancy borders, occasionally merely an interwoven mixture of colour; and others, again, are quite distinct from the rest of the dress—red, blue, and tinsel, in very coarse weaving, with a thread of silk here and there. These give the necessary touch of colour so important this year, and make a quiet, unassuming dress of more consequence. Bordered cloths and striped tweeds are the most distinctive novelties in winter materials I have seen yet. The stripes are broad and shaded, each quite two inches wide, the groundwork throughout being two tones, say blue and gold, or gold and brown, black and brown, porcelain-blue and brown, white and brown, or green and brown.

Silk and wool brocades make up with plain materials. A new sort of plush is to be used for trimming; the ground has a silk stripe or thread visible through the pile of the plush. Next month I will tell you more about this; but I think I have said enough to show how to make necessary purchases.

Meanwhile many ravishing toilettes are being prepared in Paris. I note that most of them have plaited—box-plaited—flounces coming high up, occasionally to the waist in front, and have distinct trains at the back. The skirts and flounces are of one tone, and often made of some simple thin material, such as Surah, the train and bodice of velvet or brocade. If of the latter, they are mostly of brocade, into which coloured sprays are introduced, and the petticoat matches some dominant tone in the flowers. Notwithstanding the richness of this material, the train is so drawn back that but little of the skirt is hidden. If the toilette is intended for day wear it is completed by a Louis XV. mantle, which is of the cape order, drawn much into the figure in front; indeed the whole secret of a good appearance in wearing this is to draw it as firmly as possible below the bust, allowing the folds to fall naturally. Such dresses, if trimmed with lace, as they mostly are now, have just a thin lining of gauze placed beneath the lace of some bright shade, which helps to preserve a fresh appearance and to add to the beauty of the trimming. The simplest dresses, as well as the most costly, are nearly all gathered, either on the skirt or bodice, or on both. Fronts of bodices gathered at the neck and bust are most becoming to slender figures, and are applied to soft woollen stuffs, muslins, and satins of the bright decided colourings now worn. Black velvet satin and cashmere so made, having a belt round the waist, and a plain basque, are fashionable with skirts of almost every kind. As the season gets colder this is a good way of wearing out old skirts, especially for dinner toilettes. The bodice can be rendered more dressy by a thick double ruche at the neck, and a scarf carried down either side of the fulness, ending in the belt. Many skirts are just gathered in a row of eight or ten runnings from the waist, and then fall sufficiently full over a balayeuse of some colour. This is a simple style, and looks well with a belted bodice.

The lace-makers—I mean machine lace-makers—have had a good harvest. Not only are Spanish laces, white, black, and coloured, much used, but also Russian, and many kinds of coarse-woven coloured and white laces intermixed for washing dresses, as well as embroidery in colours on white grounds. Quite the newest thing is fine twine lace with pendant fringe, not unlike Macrame; it has the advantage of being most durable. Many of the best Paris dresses have flounces of silk or satin worked in English embroidery.

Crinoline is gaining in favour; maybe we shall soon be of the same unwieldy circumference as some twenty years ago. How we shall make our way through the drawing-rooms, so overcrowded with furniture, remains to be seen.

Even the new silks, many of them, have printed and interwoven borderings, which will be the deathblow to all kinds of passementerie, for such printed



bands will only require lace or fringe to complete them. There is, as the linendrapers say, "a feeling" for silk laces of firm make and varied colouring; steel lace and other tinsel are found to be too perishable, and too costly for moderate purses.

For evening wear, some of the very handsomest gowns are made of silk or satin, draped with gauze, interwoven with beads. These cost too much money for the multitude, and I know many industrious fingers busy outlining, in bugles and other beads, the brocades interwoven with the season's gauzes—and the effect is excellent.

Light materials, such as nun's cloth, bunting, &c., which make pretty garden-party dresses, that come in usefully for small dinner-parties in the winter, are trimmed with both moire and watered silk, for both are once more to the fore, and will be used in the winter, it is said, by themselves and as trimmings. The varied tones of the same shade which the watering produces has a most happy effect on soft, lustreless woollen stuffs. With any cream or neutral dress, young girls wear large round broad-brimmed hats of a decided colour—blue, brown, or ruby—the coloured lining coming well next the face, the crown simply trimmed with two long ostrich feathers. These sort of hats are no longer bound at the edge, and an absence of streamers or ends of ribbon is considered "the thing." Dark straw hats with crimped borders will be worn this year.

A word as to bathing suits. The newest notion has been to have no sleeve whatever. The jacket is cut low at the throat, and finishes, as far as the sleeve is concerned, above the shoulder, giving the arm liberal play in swimming. The jackets are all belted and very loose in front; the trousers no longer come only to the knee, but to the ankle, and are made very full, like those of Turkish women. They have the advantage that when wet they do not show the figure with undue distinctness. Bathing dresses become each season more ornamental, and white, embroidered in colours, have been more sold in France than any other kind. Occasionally a bright-coloured wide scarf with fringed ends is tied with a large bow at the side, but it is apt to get in the way of the swimmer, and should not be

patronised; nor should the plaited trimmings at the neck and knees, which are cumbersome, and cease to be ornamental when once wet. The long walks to the sea which many parts of the coast entail, both in England and France, make a cloak for wearing over a bathing suit a great comfort, if not a necessity. The best material to make these of is rough unbleached Turkish towelling.

In Paris, as well as England, great attention is being paid to what we call tailor-made dresses; and Frenchwomen, as well as English, recognise that they are the best suited to travelling and to hard country wear. But they require to fit to perfection, and to be as simple as possible. There is no very decided novelty in their mode of making, except that the skirts are from twelve to eighteen inches fuller, and much more bouffant at the back. The newest style is neither cloth nor serge, but small-checked — pin-check is the proper term—woollen tweed or French twill. As far as the cut of the bodice is concerned, they might be riding-habits; the sleeves are just as narrow, just as high on the shoulders, and the basque often coming off to a mere nothing in front, and deep and plaited at the back. There is, however, another style of basque—viz., an all-round—carried well down on to the hips, and carefully weighted with the leaden weights which, happily for home dressmakers, can be bought at most of the drapers'. If my readers are living in a country place where they are not procurable, let them replace them with pennies; but the weights are better, because slightly heavier and smaller in circumference.

Nothing is, however, so becoming to a really good figure as a basque shaped well on the hips. Tailors make only one dart seam in front, and their work is thorough and calculated to wear. The skirts hang well, and have useful contrivances for shortening when necessary; and there is more than one pocket, and these are placed where they can be of use. Some new and really pretty seaside suits are made with petticoats of the striped linen stuffs used for awnings, the colour in the skirt matching the flannel used for the bodice and tunic. This is just one of the modes which are very stylish if well carried out, but otherwise vulgar. To make the costume complete, the stockings must match. People have gone very mad in this matter of stockings, and I have lately seen some for full dress with gold coins falling from the open-work, and occasionally interwoven. Many women now embroider tiny bouquets on the instep, between the interwoven stripes, and so for a very small outlay of work, make a pretty-looking stocking to match their several costumes.

Bonnets and hats, as well as neckties, are now decorated with gold or enamelled brooches of most varied forms. Sometimes they are gridirons, or beetles, or croquet mallets, and even fire-engines; one brooch being a lobster, another a shoe—not a pretty,



high-heeled, fine-pointed Louis XV. chaussure, but a broad-toed old battered shoe, which might have been discarded by a ploughman.

In London there has been quite a reaction this season with regard to colour. Silk coats of divers shades, as well as black, fit the figure closely, and reach to the hem of the dress, and these, with the addition of quilting, are preparing for winter. For theatres, red silk cloaks of the same kind are worn.

Fashionable women across the Channel have not adopted either the pancake, sugar-loaf, Spanish muleteer, or the other Parisian vagaries in head-gear, which are nearly all large. They keep to the close-fitting Princess shape, and make it in any vivid shade they fancy. Even the Princess of Wales has countenanced the new order of things. The last time that I saw her she was wearing a dress of dark blue silk, with a Japanese design in all colours upon it, and a bonnet trimmed with coral.



White pinafores are no longer *de rigueur* for children, and puffs have found their way even to the tiniest shoulders, as a reference to the little figure at the commencement of this article will testify. Red or navy blue twill, coloured sateens, and grey linen are all used for pinafores that aspire even in a small degree to the æsthetic. The other outlined figures comprise a fashionable Merveilleux walking dress, made with much gathering on sleeves, skirt, and pockets, and two demi-saison out-door coverings—a Hubbard and a tailor-made jacket; the skirt worn with the latter is cleverly trimmed with kiltings, gatherings, and bouillonnés.

There are two groups illustrating new costumes for in-doors and walking. In the one (comprising six figures), foulé cloth, Estamene serge, Chuddah, and Vicuna can be used for the dresses, always bearing in mind that those with woven borderings of distinct colouring are the newest. The small maiden standing at the head of the group wears a pretty serge costume of the new violet shade, piped with red silk, the simulated waistcoat being of the silk. No. 2 wears an embroidered costume, the embroidery showing upon the large collar, deep cuffs, and *quilles* at the sides of the skirt. No. 3 shows the chemisette of bright contrasting colour—say red satin with brown cashmere—and the pointed bodice, with sleeves very high on the shoulder. On No. 4, the new polonaise with raised hips, as well as raised shoulders, can be seen; here also are gatherings round the neck and at the pointed waist. This polonaise is dissimilar in colour and material from the skirt. The seated figure, No. 5, wears a skirt of golden-brown Spanish lace, over satin to match, and a broché bodice with long basque, also of the same colour. The little girl at the end of the group wears a bège blouse frock with bright Algérienne trimmings.



In the remaining group, comprising four figures, the toilettes are more dressy and more appropriate for evening wear, and here will be found suggestions for puffed and gathered sleeves, for which there is quite a mania in England. Figs. 2 and 4 illustrate the newest forms of the furore. The third figure (explaining a difficult passage to her neighbour) is attired in that most useful dress of black Spanish lace, with here and there a touch of bright-coloured satin—terra-cotta, orange, or red, whichever suits best the complexion of the wearer; for the becoming must never be lost sight of when in quest of the newest and the most fashionable.

And for making up all these dresses there is no lack either of novel materials or novel combinations. The new plushes are decidedly handsome; the pile is so long that the various patterns apparently pressed on its surface have a particularly rich effect. The new shaded plushes are most useful for trimmings, so are the striped moires. Chenille fringes with thick strands not terminating as heretofore with silken balls are the best trimmings for plush, as they harmonise with its style. Besides these, there are new gimps made of what looks like satin piping formed into arabesques, and totally different from what has been worn for many years past.



THE GATHERER.

A New Torpedo.

The torpedo having practically revolutionised the conditions of naval warfare, it can scarcely surprise us to find that inventors are turning much of their thoughts to developing the usefulness (that is, destructiveness !) of so potent a weapon. A Roumanian engineer has designed a new kind of torpedo, which in several points exhibits considerable orginality. Its chief peculiarity is that it can be managed under water for twelve hours at a stretch, acting at a depth of from one hundred feet in rivers to seven or eight hundred feet in the sea. By means of screws it can be made to rise or sink noiselessly, and either suddenly or by gradual stages. Its system of illumination is internal, and enables the officers to see for a distance of a hundred and thirty feet under water. While on the surface it is managed like an ordinary iron-clad vessel, but it can manœuvre in any direction. All this is very ingenious, but we devoutly trust that there will be no occasion for its use.

Public Barometers.

It would be a great advantage to shipping if every port had its standard barometer, with which masters of vessels could compare their ship's barometer before starting on a voyage. In this way their observations would be far more accurate than at present, and comparable with each other. The result would be a decided gain to the science of meteorology, and also to commerce. This plan was advocated as far back as 1854 by Admiral Sir F. A. Shadwell, but it is only being put in practice now. The Meteorological Office have designed a standard barometer for exposure at docks and other public places, so that private individuals and ship's officers will have an opportunity of comparing their own instruments with it, and finding out their index errors. The new standard will be cased in brass, with an enamelled glass scale, and the index error framed and glazed beside it. It will contain no wood to warp by the action of the weather, the tube will be of strong glass, and the cistern will be free from leather, which is apt to stretch or shrink with time. It will be a true standard, and vastly superior to the barometers very kindly presented to fishing villages and coast-guard stations by the Duke of Northumberland, and the Board of Trade and other institutions.

A New Exhilarant.

The extraordinary exhilarating power of "laughing gas" is well known ; but a similar property has just been discovered in a liquid mixture of phosphate of soda, and tincture of the ergot of rye. While treating a female patient with tincture of the ergot of rye for a painful affection of the knee, Dr. Luton, of Rheims, discovered that by adding a little of the phosphate of soda to the medicine, it sent the patient into uncontrollable fits of laughter, which evidently sprang from the merriest ideas. No effect was observed until three-quarters of an hour after the dose was taken ; and after the intoxication died away, the patient continued in the best of humour for some time. Experiments were then made on a number of persons, but it was found that females were the most susceptible to the influence of the potion. In the case of some men, only giddiness and a slight headache was the result. It is worthy of remark, in this connection, that rye-bread in wet seasons is apt to produce a feeble exhilaration of the same kind, perhaps because it contains a small percentage of the ergot. We trust that doctors and dispensers will be as sparing as possible in the use of this drug, so as to prevent its employment as a species of intoxicant.

A Refrigerated Store.

The great quantity of fresh provisions now imported into this country, in cooled chambers fitted up in ocean steamers, has necessitated the erection of refrigerated warehouses, in which the meat or vegetables can be stored to wait the market. Such a magazine has been constructed at the South-Eastern railway station between Upper Thames Street, London, and the river, where the waggons of the railway laden with produce can be lowered into the premises, while, on the other hand, the cargoes of ships can be received from the wharf. There are eleven apartments in the warehouse, and each of these is exhausted of air by a Beales' exhauster capable of abstracting 15,000 cubic feet of air per hour. The chambers are cooled by means of cold brine circulating in cast-iron pipes ; and the brine is cooled on Tellier's system by bringing it into contact with pipes containing methylated ether which has been compressed by a separate engine.

A Colour-Organ.

The different colours of the spectrum form a scale of light which has often been compared to the musical scale, and the idea has recently taken shape in what has been termed a colour-organ. This consists of a musical instrument, such as an organ or piano, combined with a set of coloured glasses having shutters behind them, which can be opened by playing on the keys. When a particular key is touched the corresponding shutter falls, and a beam of light shines through the exposed glass, illuminating it with fine effect. By touching different keys, different harmonies of colour may be produced. The whole tones and semitones in an octave are represented by the glasses as follows :—C, red ; C sharp, orange-red ; D, orange ; D sharp, orange-yellow ; E, yellow ; F, yellow-green ; F sharp, green ; G, bluish-green ; G sharp, blue ; A, violet-blue ; A sharp, violet ; B, violet or crimson. The play of colour during the performance of a quick air is said to fascinate the eye, and the observer gratifies two senses at the same time.

A Cancelling Stamp.

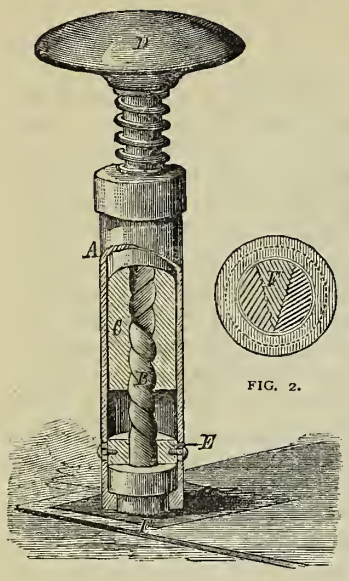


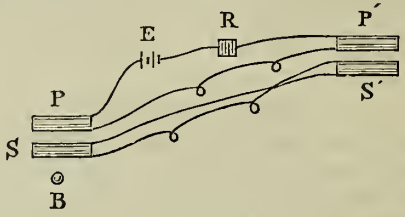
FIG. 1.

FIG. 2.

It has often been said that the British and other Governments lose a considerable amount of money every year by the re-use of cancelled stamps. Whether or not the perforated stamp is an all-sufficient safeguard against such malpractices, the appliance represented in the annexed engraving cannot but be effectual. The body, A, of the canceller contains a sliding nut, C, which is secured to the handle, D, and receives the screw, B, fastened to the revolving cutter-head, F, which is held in its position by an internal flange at the bottom of the handle, and by an inserted collar, E. Between the handle and the top of the case, A, there is a spiral spring which serves the purpose of returning the various parts to their normal position. The cutting-head (shown in detail in Fig. 2) is marked filewise in different directions, so that when it is revolved by the engagement of the screw B, and nut C, the surface of the stamp is abraded. As the cutter-head has previously been inked, the ink will be absorbed into the roughened surface, and, the obliteration being perfect, the stamp cannot possibly be restored to its pristine condition. The canceller can be applied almost instantaneously, so that this method has also the advantage of involving no delay.

A Painless Probe.

We have already described the electric probe of M. Trouvé, by which a bullet or fragment of metal in a wound is made to indicate its position by completing an electric circuit across the sharp point of the probe and ringing an electric bell. This probe in its general features is like an ordinary surgical probe, and requires to be introduced into the wound. Besides causing pain in the operation, it is therefore subject to the usual disadvantages of a penetrative instrument. The wound, for example, might be of such a nature that it would be dangerous to rifle it. Quite recently, however, an absolutely painless means of detecting the location of a bullet has been suggested and devised. This is a modification of the Induction Balance of Professor Hughes, which we have already illustrated in the GATHERER. This instrument is extremely sensitive to the presence of small masses of metal in its immediate neighbourhood, and can be used for telling a base coin from a good one by virtue of this property. Accordingly Professor Graham Bell, the inventor of the telephone, conceived the happy idea of applying it to determine the position of the missing ball in General Garfield, the American President, and Professor Hughes devised a special form of the apparatus for the purpose. Trials with it have been quite successful, and the bullet has been located at a point above the groin, without the instrument even touching the patient. We are not yet aware of the precise nature of the arrangement used by Professor Bell; but a possible plan is illustrated in the figure, where P and P′ are two primary coils, connected by wires with an electric battery, E, and a rheotome, or rhythmical interrupter, R; S, S′ are two secondary coils in circuit with a telephone. These two latter coils are so wound and adjusted that the induced currents in one can be made to balance those in the other, thereby producing absolute silence in the telephone. When, however, this balance is disturbed by the neighbourhood of a piece of metal to one of the secondary coils, the rhythm of the rheotome is heard in the telephone. If, then, the two opposed coils P′, S′,



are sheltered from disturbance, and the other two, P, S, are moved about in the region where the hidden bullet, B, is lodged, the presence of the inducing metal will disturb the balance, and sounds will be audible in the telephone. By trying with a bullet of the same weight and make, the distance of the bullet from the secondary coil, S, may be approximately ascertained. We may add that this plan was suggested last year as a means of prospecting for gold nuggets and other metalliferous ores.

A Useful Lesson in Physics.

An American scientific journal describes an experiment which ingeniously illustrates the instructions that have repeatedly been published, as to how a person in danger of drowning may prevent the body from sinking. It is a well-known fact that if the hands and arms be submerged, and the lungs be kept filled with air, the body must float. Unfortunately, too many people become panic-stricken when exposed to risk of this kind, and, throwing their arms wildly above their heads, almost immediately go under water. Perhaps they do not clearly appreciate the scientific principles upon which the precautionary conduct referred to is based; if so, the experiment already spoken of will explain

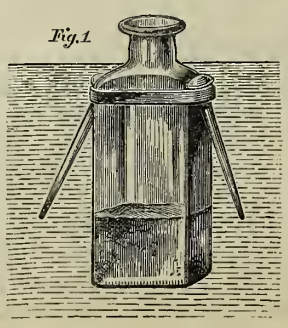
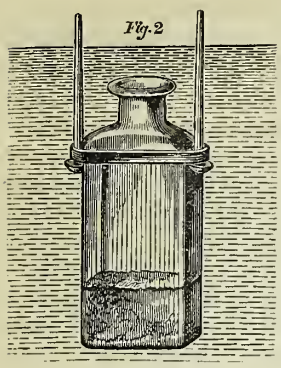


Fig. 1



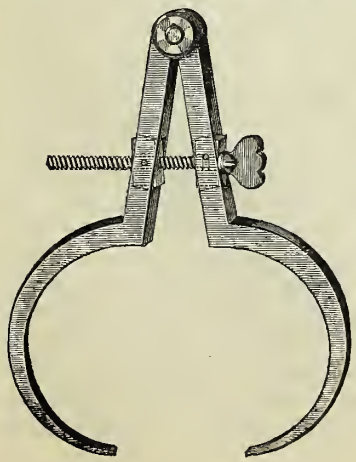
them. Fig. 1 represents a short-necked, square-shouldered bottle, with a brass-headed nail securely fastened on each side by means of a rubber band. Let the bottle be ballasted with sand so that it will just float when the nails are turned downwards, as in Fig. 1. After this has been satisfactorily done, turn the nails upwards, as in Fig. 2, and it will be at once noticed that the bottle will be either forced under water, or tipped over so that the water will enter the mouth, when it will speedily sink. This experiment speaks for itself, and its great practical value will impress itself upon all young people who see it performed.

Another New Thermograph.

In a recent number of the GATHERER we described an ingenious, but somewhat complicated, apparatus for recording continually the temperature of the human body. A simpler contrivance for the same purpose was recently brought before the French Academy of Sciences by its inventor, M. Marey. It consists of a thermometer-tube of brass, filled with oil, and connected by means of a capillary passage with a Bourdon tube, which changes its curvature according to the expansion of the liquid in its interior. The rise of temperature is thus made to alter the curvature of the Bourdon tube; and the latter being connected to a marking stylus, a permanent record is obtained of the fluctuating temperature of the body to which the thermometer is applied.

Improved Callipers.

In using callipers—as the compasses are styled which are used in measuring cylinders, balls, or other round surfaces—there is sometimes a risk of the instrument slipping and giving a lot of unnecessary trouble. By a useful invention—represented in the woodcut—this annoyance is rendered impossible.



The improvement consists in an adjusting device, by means of which the callipers may be opened or closed, and held securely in any position. A bearing in one leg of the instrument, and a nut in the other (both working on a swivel), receive the adjusting screw, which is prevented from moving longitudinally by a groove in the shank, and by the insertion of a pin through the bearing and through the groove. It is obvious that the bearing and nut of the screw must always be parallel to each other in any position of the callipers.

A Life-saving Umbrella.

The figure illustrates a combined life-buoy and umbrella, which will recommend itself to persons unable to swim when about to go upon the water. The inflated buoy is shown at A A, and when the



umbrella is folded it occupies a position surrounding the stick. The latter is made strong, and hooked so as to be easily grasped; and a light netting is sometimes added to the outside of the cover, to allow of the umbrella being readily clung to while floating. Yachtsmen will probably find the new rain-shade of service while at sea.

The Sun Lamp.

A beautiful and novel electric light has appeared in Paris within the last few weeks. It is called *la lampe soleil*, from the likeness of the light to sunshine, and is the joint invention of MM. Clerc and Bureau. It is produced by taking a small marble brick, and boring two holes into it in a slanting direction towards each other. The ends of these holes very nearly reach the bottom of the brick, and are separated from each other by a wall or partition of the stone. Into the bore-holes are inserted two rods of the fine carbon prepared for electric lamps, and their upper ends are connected to the poles of the dynamo-electric machine or generator. The current, in passing from one carbon-point to the other through the separating wall of marble, heats it up white-hot, and an intense but mellow light is emitted by the bottom of the brick underneath the carbon points. The marble becomes calcined, and the light is therefore a kind of Drummond lime-light, produced by electricity instead of the two gases oxygen and hydrogen. The price of the new lamp is small, for the carbons feed themselves as they are burned by the action of their own gravity, and no expensive mechanism is required. Moreover, the cost of maintenance is reckoned at only a halfpenny per hour, as the carbons consume very slowly. *La lampe soleil* has already been intro-

duced with success into several of the shops and cafés of Paris.

Colour Photographs.

Some approach to the solution of the great problem of photographing an object in its natural hues has just been made by two French photographers, MM. Cros and Carpentier. The process consists in taking three photographs of the object, as seen through screens of orange, green, and violet liquid respectively, that is to say, three photographs of the object with its blue, red, and orange rays quenched in turn. These proofs are taken on glass, and the parts corresponding to the quenched light are left opaque, whereas the parts influenced by the rays become transparent. A second set of three plates is then prepared by coating them with albumenised collodion on which albumen is coagulated by the action of alcohol and bromide of cadmium. After being allowed to imbibe bichromate of ammonia, this coating is exposed for some minutes to a diffused light coming through one of the transparent images already taken with a coloured screen. The transparent parts of the latter allow the light to pass and cause the albumen to contract, while the opaque parts screen the light. The result is that, when the plate is immersed in a colouring bath, the albumen absorbs the colour in those regions protected by the opaque portions of the first image, and rejects it in the other regions which contracted under the light passing through the transparencies of the image. This process is repeated for all three images obtained by the coloured screens, and thus by employing three separate baths of red, blue, and yellow for the images got by the green, orange, and violet screens, the quenched lights are re-combined in one picture of the object. The liquid screens are made of solutions of chloride of cobalt for the violet, sulphate of copper for the blue, and bichromate of potash for the orange; and when the electric light is employed they are simply placed before the lamp, and the object bathed in the coloured light transmitted through them is photographed direct.

Electricity in the Balloon.

The new means of storing electricity has already made itself useful in ballooning, although not yet in the way suggested by Mr. Martin Tupper. That well-known writer proposes to urge balloons through the air by electric power, stored in a Faure "secondary battery," and the idea is ingenious; but the intrinsic weight of these batteries will require to be very much reduced ere they can be serviceable for this purpose. Nevertheless, on a recent balloon trip, made at Paris by M. W. de Fonvielle and M. Lippmann, a store of electricity was taken in a Planté accumulator sufficient to keep a safety-lamp on the electric incandescent plan burning whilst they read their thermometers and barometers, or made a note of observations on the sky. Lamps of this kind will be as safe for aëronauts up in the air as for miners in the bowels of the earth. Moreover, we understand that M. Fonvielle has designed a special compass for balloonists, illuminated by the electric light.

Composite Portraits.

Mr. Francis Galton has obtained some curious results by combining several portraits so as to get a general resemblance or typical face. The individual photographs are taken on glass; the typical features being got by superimposing these on one another and throwing the general image on a screen. In this way he has prepared typical faces of persons afflicted with diseases which, like consumption, show a characteristic physiognomy. He has also obtained a generic photograph from seven criminals, and it is easy to see how the plan can be made of scientific and even artistic value. Types of different races, families, and professions can be produced, which will prove not only interesting but instructive. The combination of a number of faces from the same family so as to form a true "family likeness" is often found to be very curious, and it is a difficult matter to say which member of the family it most resembles.

The Autocopyist.

A modification of the chromograph, giving copies of letters in the black ink of lithographers, has been invented by M. Lelm. It consists of a frame on which is stretched a sheet of parchment paper, coated with gelatine. The manuscript to be copied is written with a special ink sold with the apparatus, and containing a base of perchloride of iron. It is laid face downwards on the gelatine, pressed by the hand, and the ink thereby transferred to the gelatine. After this a roller charged with lithographic ink is passed over it, and the letters will be seen to absorb the ink, so that if a piece of clean white paper be pressed over it, a copy of the writing in black will be obtained. Fresh copies can be made by passing the roller over the manuscript as before, and laying a clean sheet of paper over it. Instead of parchment paper, a glass plate coated with a thin film of gelatine, hardened by alum, can be employed.

The Velocity of Light.

The velocity of light has been measured more than once by different methods, although the experiment is a very difficult one. M. Cornu made it 186,700 miles per second, and Mr. Michaelson, an American, obtained a result very nearly the same—186,500 miles. A recent determination by Professor George Forbes and Dr. Young, of Glasgow, places it at 187,200 miles per second, but this higher number is believed to be due to the quality of the light employed in these later experiments. Cornu used lamp-light, and Michaelson sun-light, whereas the Scotch observers used the electric light. Now the latter contains a greater proportion of blue rays than the yellower light of the sun or oil, and Professor Forbes has made the discovery that blue light travels at least one per cent. faster than red light. That is to say, a blue ray travels 101 miles for every 100 miles covered by a red ray. This result is calculated to change our notions of the luminiferous ether which transmits the vibrations of light. The

experiments were carried on at Wemyss Bay, down the Clyde, by the well-known method of Fizeau modified in the direction of greater accuracy.

Fans in the House.

When the weather is close and oppressive, it is usually found that even though the windows be thrown wide open, the atmosphere feels only slightly less heavy than before. What is wanted is something to maintain constant circulation of the air, and as water-power is now being largely used for several household purposes, there is no reason why the rotary fans of the workshop should not be introduced into the home. Indeed they are now made specially to serve this end. They may be fastened either to the wall or ceiling, and driven by a round belt direct from the water-motor. The blades of the fan may be covered with paper or muslin of various colours, so that the appliance need not form an unsightly object in the dining or other room. The shaft of these fans runs in metal journals, and needs no oiling, which is a considerable advantage where they are put up over tables. By changing the angle of the blade, the amount of air can be regulated as required.

The Electric Light in Coal-Mines.

The recent researches of Professor Abel have established the fact that the atmosphere of a coal-mine is rendered inflammable when only a very small percentage of fiery gas is present, provided it be polluted, as nearly always happens, with coal-grime, or even ordinary dust. Since this is so, we need not be surprised at those mysterious explosions which every now and again shock the public sense; and the only possible preventive seems to be the compulsory use of a light which cannot set fire to the air. This already exists in those incandescent electric lights which burn in a vacuum hermetically sealed in glass bulbs. Recent experiments with a lamp of this kind, invented by Mr. J. W. Swan, have proved entirely successful in lighting the Pleasby collieries. These pits are ordinarily worked by naked lights, because the coal contains no free gas; but the electric lamps proved very much superior in point of brightness, and the safety of the latter even in the fieriest mine is assured so long as they are not broken. To prevent this contingency Mr. Crompton has designed a special lantern which guards them from ill-usage, and contains in itself sufficient air to burn up the incandescent carbon to ashes before it can ignite the outside air, should the vacuum bulb get broken. By immersing the bulbs in water there would also be little chance of the carbons igniting the air, should the bulbs themselves get broken.

The Transplantation of Bone.

The engrafting of flesh is a surgical feat which has been frequently accomplished with success; but the first known instance of transplanting a piece of bone from one living person to another was announced at a recent meeting of the Royal Society. In 1878 a young child was admitted into the Glasgow Infirmary with necrosis or mortification of the right humerus or bone of the upper arm. The mortified part was removed from the bone, but even after fifteen months no fresh bone had grown to fill up the gap. This extended to two-thirds of the entire shaft, and it became necessary to try and transplant a piece of alien bone into the place. On three several occasions portions of living bone were transplanted into the child's arm; the pieces being obtained from osseous wedges which had to be excised from the healthy bones of other patients. The pieces were divided into many small fragments before being applied, and in course of time they united together into a solid rod, thereby converting a helpless arm into a useful one. The operation is of great importance as demonstrating that a piece of transplanted bone is capable of living and growing on another system, to the benefit of the latter.

Celluloid.

This new material is becoming largely used for ornamental and decorative purposes. It can be made, by proper pigments, to imitate very closely such diverse substances as amber, jade, shell, coral, ebony, turquoise; and it can be moulded into any required shape. Celluloid is manufactured by preparing pyroxyline from cigarette paper treated with sulphuric and nitric acids, then combining this pyroxyline with camphor gum. The process is a long and complicated one, but the resulting material is very dense, and takes a high polish, while it can be impregnated with a variety of colouring matters. It has, however, the drawback of taking fire and burning brilliantly when a light is applied to it. Moreover, if heated to 363° Fahr., and then struck with a hammer, it will explode with violence. Therefore, although useful under ordinary circumstances, it is a somewhat risky and unstable substance to employ.

A Reservoir of Electricity.

A marked improvement in our means of storing up electricity for practical use has just been effected by M. Camille Faure, a French physicist. Until now, the best electric magazine was the secondary battery of M. Gaston Planté, which consists of two sheets of lead rolled up together without touching, and plunged into a vessel of water acidulated with sulphuric acid. The storage of this arrangement was considerably increased by coating the lead plates with oxide of lead; and a battery with plates six feet square could hold a sufficient quantity of electricity to heat a fine platinum wire, three inches long, white-hot for ten minutes. This success, however, was obviously not sufficient for electric lighting purposes, and M. Faure has made a great advance by coating the plates with a layer of red lead or minium. When this apparatus is charged with electricity from a battery or machine, the red lead on one plate is reduced to a per-oxide, and spongy lead is deposited on the other plate. The current absorbed by a battery of this kind weighing 165 lbs. is capable of

performing a horse-power of mechanical work for the period of an hour. Hence it is not unlikely that electricity will before long be distributed to consumers, not only in pipes, like gas or water, but in private reservoirs or holders.

A Hill-side Locomotive.

The ordinary locomotive will not grip the rails sufficiently well to pull a train of carriages behind it up a steep slope, and hence it is necessary in constructing railways to go to great expense in making détours and tunnels, or embankments, in order to avoid running up the steep slope of a hill. An ingenious solution of the difficulty has, however, been contrived by Mr. Handyside, whose locomotive is represented in Fig. 1. His plan is to make the locomotive act in the ordinary way when the railway is level enough to admit of it; and when it becomes too steep, to make the locomotive perform the part of a stationary engine working a drum and rope. On level parts of the line the locomotive draws the train close behind it; but when it arrives at a steep gradient it leaves the train, and moves on to the top of the slope, paying out a traction-rope as it goes. When it reaches a favourable position it is made to grasp the line by special brakes, and then to pull the waggons behind it by means of the rope and drum. Handyside's locomotive is now employed at Hopton, on a slope of seven feet in the hundred. While upon this subject, we may mention that longitudinal iron "sleepers" are being introduced into Belgium and Prussia, instead of transverse wooden ones. They are the invention of MM. Hilfdt and Haarmann, and are made in lengths of about nine mètres, and of a cross-section like that shown in Fig. 2, where *a* is the sleeper, shaped like an inverted trough; and *c* is the rail, bolted to the sleeper by iron clamps, *b b*. The destruction of timber for railway sleepers is enormous, no less than two millions and a half of them being required for the repair of railways in 1878. It is therefore satisfactory to find that iron can be made to take the place of wood for such a purpose.

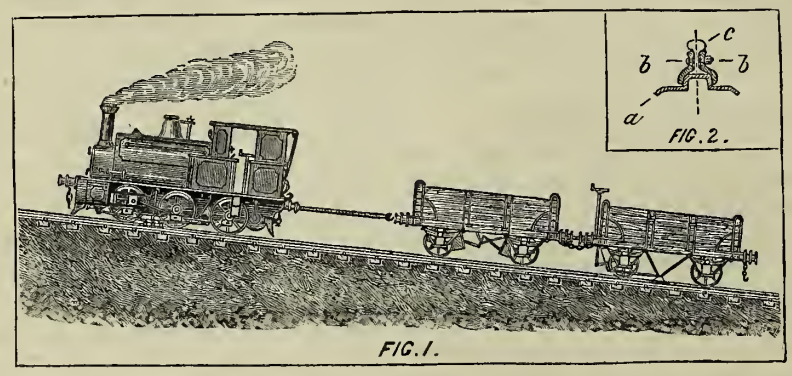


FIG. 2.

FIG. 1.

An Electric Speech Recorder.

There are a number of inventions which, although of no practical value, are nevertheless interesting, because they realise some ingenious idea. The phonograph of Mr. Edison as yet belongs to this class, for it has not hitherto received any practical application. So also does the speaking machine of M. Faber, recently exhibited in London. Some of our readers will perhaps remember this complicated assemblage of levers, which were manipulated by the operator in order to control the motions of an artificial mouth, tongue, and nose. Another invention must now be added to the list, and the object of it is just the contrary of M. Faber's machine. It is, in fact, designed to register the motions of the mouth involved in speech on a sheet of paper, by means of intermediate levers. Invented by M. Amadeo Gentilli, of Leipzig, the instrument consists of a framework of delicate levers, which enter the mouth and are actuated by the teeth, lips, tongue, and nasal breath. The levers, when raised, make electric contacts, which send currents of electricity through electro-magnets, like those in the Morse telegraph instrument. Each of these magnets attracts an armature of iron, which is attached to a marking disc well smeared with ink; and a mark in the shape of a "dash" is thereby inked on a moving band of paper. The dashes produced by the several levers constitute a group of signs which correspond to the vocal sounds uttered in actuating the levers. The use of such an apparatus cannot, of course, be conducive to persuasive oratory.

PRIZE ESSAY ON "TRUE ECONOMIES IN HOUSEHOLD MANAGEMENT."

AWARD.

The Editor has much pleasure in announcing that, after careful consideration of the Essays—to the number of ninety-six—sent in for this Competition, the PRIZE of £10 has been awarded to

LIZZIE HERITAGE, 19, Cherry Street, Coventry.

Special Commendation has been awarded to the Essays by—

William J. Lacey, High Street, Chesham, Bucks;
Amelia C. Tyler, 7, Queen Anne's Grove;
W. Pethybridge, 29, Methley Street, Kennington, S.E.; and
Marie Compston, 56, Bruce Street, Leeds.

The Prize Essay will probably appear in the November Part of the Magazine.

THE PROBATION OF DOROTHY TRAVERS.

By the Author of "In a Minor Key."

CHAPTER THE THIRTY-EIGHTH.

GEOFFREY WANTS TO SEE DOROTHY.



DOLLY and Lou set out in the pony-carriage in good time, for there are seven miles between them and Rushbury. Ugly as is the country about Wrangham, rendered ten times more dreary and bleak than it naturally is by its bare, gaunt stone walls, that rise everywhere in lieu of leafy hedge and moss-grown bank, it looks almost beautiful to-day in the bright October sunshine, filling in the distance with a blue and misty film, bringing out the varied tints of the trees, and throwing a golden haze on all things.

"What a glorious day!" says Dolly; "it makes one feel so happy;" and, in truth, she does feel happy. It seems as though the sunshine has not only touched the earth with new life, but has stirred within her something of the old light-heartedness of the days when she and Harry used to sit by the stream, and laugh and sing from the mere joy of existence, because the world was so beautiful. "You must drive, Lou, she continues, "or I shall not be fit to finish Alice when I get to Rushbury;" and Dolly jumps lightly into the little two-wheeled cart, and seats herself by the side of her sister, for driving is one of the things she has had to give up in a great measure since her illness; even that, for any length of time, tires her considerably.

At Rushbury, Joan sits musing in her room, looking idly out of window, whence she can see Lord Rushbury sitting on the terrace, enjoying the sun and reading the paper. She is going away the day after to-morrow, back to her work, and she ought to be glad. And yet, truth to tell, she is not. On the contrary, she cannot bear to think of leaving all these dear naughty children, who are always in mischief and always so sorry, who haunt her footsteps all day long, worrying their father to death, and yet of whom he is so proud.

She sees him now lay down his paper as two squeaky little voices appeal to him to settle one of the everlasting squabbles, hears him say, "Ask your friend Joan—Miss Travers," and then she rises with a sigh. She must see that Alice does not tire herself for this afternoon's sitting, for Dolly will be here soon, and, with another sigh, she leaves the room to seek the child. On the staircase she meets Lady Rushbury.

"The two girls are coming, Joan. Alice has seen the pony-carriage in the drive; they will be here directly. By the way, dear, there is an account in the paper of an accident which will interest you—a fire I think it was—in Rome. Your friend Mr. Ingram is mentioned as having worked most bravely and energetically among the sufferers."

Mr. Ingram! What ages it seems since she has heard that name, for ever associated in her mind with Bruin. How it has faded, even died, she feels, out of her life, with all the fresh currents that have been introduced into it of late. Of what far more paramount interest at this moment is Alice's picture!

"I must read it afterwards," she rejoins, "I have no time now," and passing on, she captures madcap Alice, and taking possession of her, carries her upstairs. Lord Rushbury meets her, and a sweet, melancholy smile lights up his refined Vandykian countenance.

"You must not spoil the child, Miss Travers," he says, "or she will miss it all the more when you are gone," and passes into the library, with still the same sad expression on his face, an expression which sends a pang to Joan's heart, and which she strives in vain to forget.

There is plenty of merry talk at luncheon among all the young people, which effectually covers Lord Rushbury's and Joan's silence. The latter cannot chase away the feeling of depression that has taken possession of her, and a spontaneous hug from little Alice, with "I love you so, Joan; don't go away," does not tend to make her better.

After lunch, Dolly is solemnly conducted to the great gallery, where the light is excellent; Alice is posed, and Joan, leaving the child with Lou to look after her, returns to the morning-room to complete some archæological notes she is putting together for her host. She is completely absorbed in her work, forgetting Dolly, Alice, children, and all, when the door opens, and the servant comes in to tell her that there is a gentleman in the drawing-room who has asked for her.

"Who can it be?" she wonders, and repairs at once to the drawing-room to satisfy her curiosity. As she enters, some one emerges from the deep bay window, where he is hidden from view, and holds out his hand.

"Mr. Ingram! How surprised I am! Why, I thought you were in Rome, energetically working among the sufferers."

"Ah! has that got into the newspapers? It is some days old now, and here I am in England."

"I am very glad to see you. I began to think we were destined never to meet again. Why do you not come to Wrangham now?"

"I do not know. Perhaps you can tell me."

"I? No, that I cannot. I am there very little, for I have let the Lodge, and Lady Travers is as inscrutable as ever."

Geoffrey glances at Joan. How well she looks, how very handsome, and how happy. No doubt the report he has heard as to her intended marriage with Lord Rushbury is true. A silence ensues, for both are thinking what to say next—Geoffrey how to convey to Joan the mission he is bent on, Joan how to find out what has brought him to Rushbury.

And, as a matter of course, they both commence on indifferent topics, anything but on what they are meditating, till Mr. Ingram breaks the ice by asking news of the Wrangham people, of Rose, of Lou, of Miss Travers. Joan smiles as she tells him all he wants to know, of Rose's unhappy marriage, of Lou, of Dolly's delicate health, of her usefulness at home, of the love of her brothers and sisters for her, of Jack out in India in a cavalry regiment, of Bob working for the artillery, of Augustus' determination to be a barrister. Geoffrey listens in silence till she has run through every member of the family, and then quietly reverts to Dolly.

"Is she happy?" he asks. "Has she got over her loss? Are they all good to her at home?"

"My dear Mr. Ingram, three questions in one breath! How am I to answer them all? Now I am going to ask you a few. How is it you have never seen or heard anything of the Wrangham people during these two years? You used not to be one to be rebuffed by a few obstacles, and as your interest in my uncle's family is so keen and strong, I should have thought you might have managed to meet them somehow;" and Joan looks him full in the face, with a world of mischief in her smile. Geoffrey laughs.

"You are quite right," he says; "but what if I have tried my utmost, and been baffled? Why, I have so far overcome my constitutional shyness"—"Oh!" breaks in Joan—"as to invite myself to Wrangham, and have been politely told I was not wanted. And that brings me to my point, namely, the reason of my visit to you here, which I am sure must have surprised you—the keen, strong interest, as you call it, I feel in your uncle's family."

"Do not let us beat about the bush any longer, Mr. Ingram," says Joan, in her frankest, most winning manner; "it is not at all in my line. You know of old that I always like to ride straight. You want to see my cousin Dorothy. Is not that what you mean to convey? She is here."

"I know she is, and that is why I came here to-day. But, Miss Travers, tell me before we go any further why is it that the whole family has combined to prevent my getting sight of her? Of course I never dreamt of such a thing at first, but it is now more than two years ago. You see, I am candid with you, but, like you, I have a fancy for riding straight."

"The principal obstacle to your seeing my cousin is undoubtedly herself. I may as well tell you, Mr. Ingram," and Joan looks him full in the face, "that she has resolved to lead a life of single blessedness, dedicated to Mr. Leonard's memory—so, at least, my aunt tells me. But as I am neither herself nor her father, I have not the slightest objection to allowing you to see her."

Geoffrey has turned pale at Joan's words. What if Dolly were irretrievably lost to him after this long weary waiting? He has hoped against hope, feeling sure how a girl of her strong, warm nature would take Harry's death, but nevertheless trusting, by the light of some inward conviction, that if he might only see her once more, matters might come straight; but now what is he to think?

"Let me see her," he asks, and spite of his smile, Joan detects the disappointment depicted on his face.

"Come with me," she answers readily; and Geoffrey rises, and following closely in her wake, arrives at the great gallery, where are heaped all the treasures of art that Lord Rushbury has made it his business to collect. In one of the deep oriel windows at the further end from where they enter stands Dolly in front of her easel, and, opposite her, little Alice in white mob cap and fichu, a base imitation of Sir Joshua Reynolds' well-known picture, seated on Lou's lap.

The whole party is too absorbed in its occupation to notice Joan and Geoffrey, and the latter, as he advances down the long gallery, heeding but little the cases of beautiful porcelain, the antique bronzes, the statues and pictures that line the walls, has time to notice that the sweet pathetic look still reigns in Dolly's eyes and mouth, that the colour has fled from her cheek, leaving it a clear creamy white, that she is even more like the Cenci than of yore, and, in his opinion, lovelier than ever. How slim and fair she looks, but so fragile, as she stands, with her pretty head a little on one side, critically surveying her handiwork. As Joan draws near, she looks up to speak to her.

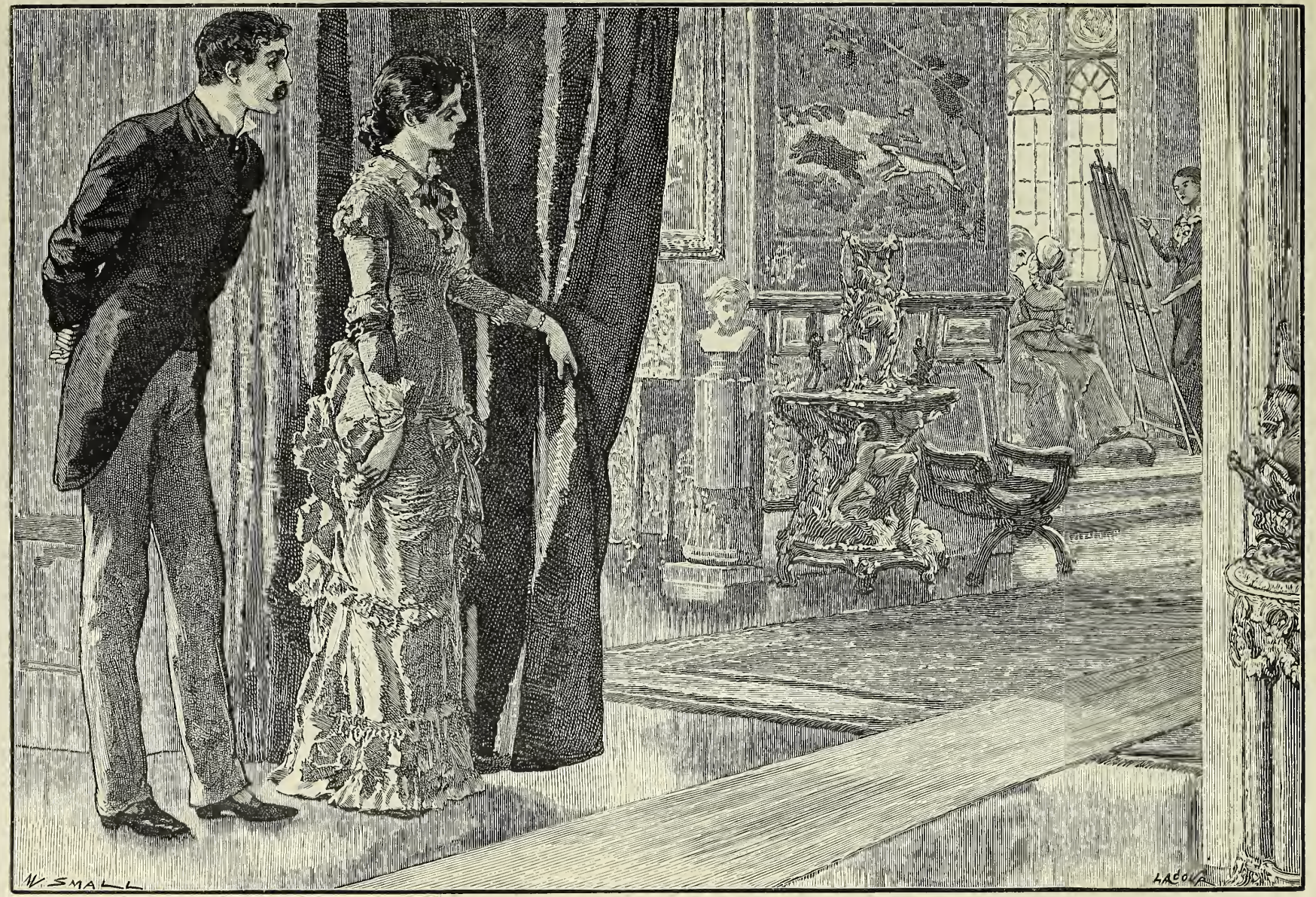
"I am so glad you are come, Joan; we want your opinion," she says; then for the first time perceiving her cousin's companion, she gives a sudden little start of surprise, turns crimson, and then deadly white.

Not so Lou. Hastily putting down Alice, she rushes impetuously to Geoffrey.

"Ah! Geoffrey, I am so glad to see you. What ages it is since we have met! When did you come?"

"A few minutes ago," he answers gravely, and never taking his eyes off Dolly. But the latter has recovered herself quickly, though with an effort, and now advances in her turn to greet him. How can she be so silly? Did not he nurse Harry?

Silently she gives him her hand, and then makes some conventional remark respecting his unexpected appearance. Mr. Ingram, too, has recovered his self-possession, which had momentarily deserted him on



"GEOFFREY . . . FOLLOWING CLOSELY IN HER WAKE, ARRIVES AT THE GREAT GALLERY."

"THE PROBATION OF DOROTHY TRAVERS" (*p.* 706).

perceiving Dolly's agitation, and the whole party is put at its ease by the perfect *sang-froid* with which he remarks that he has come to see Miss Travers' latest work. Alice is posed afresh, and Geoffrey and Joan, without paying much attention to the artist, proceed to inspect, criticise, and admire the picture.

"It is lovely!" says Joan, and it is no more than the truth, for baby Alice, as she is often called, has the sweetest of child-faces, to which Dolly has done justice, and the mob cap and fichu are no less becoming to her than they were to the children who lived in the days of our great-great-grandmothers.

But the child herself has no liking for the part of heroine, and commences now to implore for release from this wearisome sitting still. Whilst Joan and Lou are occupied with her, Geoffrey turns to Dolly.

"How you are improved!" he says. "You must have been working very hard since I saw you last."

Try as she will, Dolly feels she must lift her eyes to his face; besides, why should she not? What is this man to her?

"I have been so fortunate," she answers hurriedly "The people who have taken the Lodge are a brother and sister, and the latter is an artist, and paints most beautifully. She it is who has taught me nearly all I know. Sometimes I go to London, and work there for a little while; and Lord Rushbury is very kind in letting me come over here to copy these pictures as often as I like. Are they not beautiful?"

"Dolly," interposes Joan, "Alice is going to the nursery now, so you had better put away your things, and I will go down-stairs and see if they have not brought up tea;" and before she has time to answer, her cousin is sweeping down the gallery, followed by Lou. Only Geoffrey stays where he is.

"Let me help you," he says, and proceeds to fold the easel, which may not be left, for fear of Lord Rushbury discovering the surprise intended for him. Silently they busy themselves with all the painting paraphernalia, whilst Mr. Ingram notices that Dolly wears Harry's watch, Harry's ring, Harry's chatelaine. Is she indeed vowed to his memory?

Presently she makes a desperate effort to overcome this unnatural constraint that has fallen upon her, and, asking him where he is staying, learns that he arrived yesterday at the hotel at Wreford. Dismayed as she is at this intelligence, yet from this point the conversation begins to flow more easily and tranquilly, and to his delight Geoffrey hears that Lady Travers is with Rose, who has been ill. He has an idea that she is the chief obstacle to his renewing his old footing at Wrangham. If she is out of the way, Sir Augustus may ask him to stay, and then . . .

"We had better go down to tea, had we not?" asks Dolly, in her sweet low voice, with a strange sensation of happiness at her heart; but, anxious as she is to put an end to this *tête-à-tête*, it is nevertheless some time before they put in an appearance in the library.

What so natural as that Geoffrey should stop to admire that cabinet of gems, that perfect little Bellini, the pride of Lord Rushbury's heart, and from them pass on to the other pictures, to the china, the bronzes, the statues that make this gallery the lion of the neighbourhood? And what yet more natural than that, from these works of art, the conversation should turn to Rome, the cradle of so many of them, and from Rome to Harry?

Neither of them knows how it comes to pass, but all the constraint has vanished between them. The old feeling of restfulness in his presence, which she had always experienced when they had passed so many hours together in Ferdie's school-room, is slowly creeping over Dolly.

From Mr. Ingram, it seems, she can best bear to hear of Harry, although he has been the chief cause of her ceaseless sorrow at his early death. Joan would have been pleased to see the result of her good-natured tactics had she been present, as an invisible witness, to watch the two standing under a divine Madonna, whose sweet, clearly-defined eyes—for she belonged to a very early period of art—seem to look her sympathy and encouragement, talking so earnestly together. There is a mist in Dolly's eyes, a lump in her throat, as she speaks of Harry, and yet they linger on. It is as though all the pent-up words and thoughts of these last two years must have their vent, and it is only the sound of the wheels of the pony-cart that she has ordered at half-past five that recalls them both to the fact that they are behaving very badly in another person's house.

Slowly they descend the staircase together, but when they reach the library door Dolly slips away to seek Lou, whose voice she has heard in the garden, and Geoffrey enters the room alone. He commences at once his apologies for tarrying so long behind, by pleading the engrossing beauties of the gallery; but the small party assembled, consisting only of Lord Rushbury, Joan, and Alice, seem hardly aware how time has been going, for they appear surprised, and—can it be fancy?—not over-well pleased at his entrance.

There is a strange light in Joan's bright hazel eye as she speaks of Mr. Ingram's visit to Lord Rushbury, a perfectly cheerful smile in response from him; Alice is capering about the room in an ecstacy of delight; the tea, alas!—and Joan wields the tea-pot—is drowned in water! What does it all mean?

The child is sent in search of her various straying brothers and sisters, to bring them and Dolly and Lou to partake of the watery beverage, and meanwhile, with a visible effort, Lord Rushbury and Joan make conversation for their guest. Not, however, till Alice has assembled all the missing members of the family, not excepting grandmamma, do they learn the reason of Lord Rushbury's singular cheerfulness, of Joan's unusual absence of manner, of the weak, washy fluid they are all silently execrating.

Alice was standing close by Joan, with her little arm lovingly thrown round her neck, and, regardless of the presence of the stranger, she announced suddenly, in her clear treble tones, to her sisters—

"Do you know, Joan is not going away on Saturday after all, but she is coming to live here always. Is not she, father?"

CHAPTER THE THIRTY-NINTH.
JOAN'S LECTURE.

IF Lou is dull, yet is she affectionate, and one of the objects of her warmest feelings is Geoffrey Ingram. Since the days of her childhood, when she was always getting into scrapes by her tactlessness and awkwardness, Geoffrey has stood her friend, and she returns his kindness by an adoring veneration, such as she would give to a favourite uncle or cousin. It seems to her dreadful that he, their oldest and best friend, should actually be stopping at an hotel, not five miles from them, whilst the doors of Wrangham are closed to him. She says as much to Dolly as they drive home, and, to her surprise—for she knows that her sister regards hospitality as one of the chiefest of virtues—finds that she does not at all agree with her as to the propriety of inviting Mr. Ingram to stay. So Lou says no more; in fact, she and Dolly, after discussing the astonishing piece of news they have just heard at Rushbury, hardly exchange six words till they reach home. Like Sir Augustus, however, she is obstinate as well as weak, and does not readily relinquish an idea; therefore, finding herself unexpectedly alone with her father, she seizes the opportunity to persuade him to write and ask Mr. Ingram to bring himself and his effects to Wrangham the next day.



"ALICE WAS STANDING CLOSE BY JOAN" (*p. 707*).

Sir Augustus is nothing without his wife, a mere puppet, whose wires she pulls, and, after the lapse of almost three years, he has entirely forgotten the

original reason of Geoffrey's banishment from Wrangham. Lady Travers has given him but a very slight sketch of her motive for this line of conduct, and three years of perfect repose, without any alarm of matrimony for Dolly, has quite put him off his guard.

Therefore, when his daughter represents to him in moving terms the inhospitality of permitting Geoffrey to remain at an hotel, Sir Augustus, only too pleased to enjoy the society of his old friend, at once acquiesces in her proposition, and agrees to ride over to Wreford that morning, and invite him straightway to Wrangham.

Dolly has spent a sleepless night, mostly in tears. That blissful half-hour with Geoffrey has renewed all the pain, the trouble, of three years ago. How she hates herself for even speaking to him! how she despises herself that the very sound of his voice, the sight of his face, has sent a thrill of exquisite pleasure through her, to be repented now in sackcloth and ashes! Consequently she has sat up half the night reading Harry's letters, and spent the other half in tears of contrition.

She is therefore hardly in a fit state to hear the news that greets her when Sir Augustus, on returning from his ride with Lou, announces that Mr. Ingram will arrive that afternoon to stay, and that a room is forthwith to be prepared for him. It seems as though the whole world were conspiring against her, and she does not know where to turn for succour. Oh, for Lady Travers!

There is no help for it, however, for when she suggests to her father that she thinks she had better go to Rose and relieve her stepmother, he at once negatives the idea, saying with some asperity that Lady Travers seldom gets a holiday from household cares, and that it is selfish of Dolly to grudge it to her.

Geoffrey arrives about five, in time for tea, and is received with the warmest cordiality by every one in the house, except Dolly. Not but what she is perfectly polite and nice to him in every way, but her manner is far removed from intimacy, and he feels that a wall has sprung up between them since yesterday even that he is at a loss to account for.

Fortunately, there is no lack of conversation. Joan's unexpected engagement is at first the one great topic, and Sir Augustus is quite animated in his approval of his niece's conduct, rejoicing that she has at last displayed some glimmering of common sense, and congratulating himself that it is no doubt owing to his admonitions that she has consented to be wise.

After dinner, which is brilliantly entertaining when contrasted with the rather dull meals the Wrangham party have been enjoying since Lady Travers' departure, Mr. Ingram begs so for music, supported by Lou, that Dolly cannot but comply. But it is of no use singing the stupidest and most common-place songs she possesses; Geoffrey is there, as in the old days, turning over her portfolio, placing on the desk all his favourites, and asking for those with which their united associations are the strongest. The spirit of Ferdie seems to pervade the room. Sir Augustus is asleep, Lou deep in the *dénoûment* of a sensational novel; to all intents and purposes the two are alone together, yet not for one moment does Dolly relax her vigilance over herself. She is friendly, she is willing to sing anything he asks for, but not by one brick can he remove the wall that has risen up in the night between them.

Only when she retires to rest does Dolly feel as though she had been engaged in a mortal conflict all the evening, so utterly tired out and dispirited is she. And this must go on to-morrow, and the next day, and even after that, for Mr. Ingram talks as though he had no intention of leaving for some time to come.

When, however, day after day goes by, and he seems to get no nearer to Dolly than he was at the commencement, he begins to fear that all the hopes that have sustained him for so long are to crumble away to dust. And any day Lady Travers may return, and his fair fabric be ruthlessly swept away, for instinctively he knows that she will oppose his union with Dolly.

His union with Dolly! What is he thinking about? Does it seem likely to come to pass? Is she not as far removed from him as in the old days of her engagement to Harry, with the advantage of her twenty-three years' experience to teach her how to hold him at a distance? Yet he had thought, nay, felt certain, that she was not entirely indifferent to him, and a good deal of small evidence that he had mentally collected in quite a legal spirit had strengthened him in his conviction. Well, he will persevere, for, as Joan said, he is not one to be rebuffed by a few obstacles, and time, which works far greater wonders, may crown him with success.

Day by day, therefore, he lays diligent siege, with ever renewed vigour, to the apparently impregnable fortress of Dolly's heart, to find himself no nearer taking it than he was last week. Yet everything is to a certain degree in his favour. Lady Travers, detained by a severe attack of influenza, does not return home, and neither Sir Augustus nor Lou, when writing—the first from accident, the second from an extraordinary flash of mental illumination—mentions their guest's presence in the house.

The bright autumn weather has to be made the most of, and throws him into the two girls' society during a large part of the day, whether riding, walking, or driving. His gun lies idle in its case, he has not yet got his horses together, he is in a lazy mood, he pleads, and Lou smiles quietly to herself as she listens to him, and answers nothing, displaying, for her, a quite abnormal sagacity.

In this way she proves a valuable coadjutor, and Dolly has to depend entirely on her own resources to avoid anything like an approach to her former intimacy with her friend. And what hard work it is! Strict watch and ward by day, sleeplessness and often tears by night.

So they have been going on for a week; and seven days, when two people are dwelling under the same roof, is a very long time: it seems to Dolly like seven years, for the struggle is ceaseless. How gladly, how willingly would she surrender and lay down her

arms, and find a very haven of rest in Geoffrey's tender, protecting care! But she has already outraged Harry in thought in his lifetime; shall she be so base as to renew the offence to his memory now he is dead?

And Geoffrey bides his time. There is very little to take hold of in his manner to Dolly, and Lou is perhaps the only one in the house who discovers his purpose, except the object of it herself. So when the whole Rushbury party, including Joan, come over to lunch, matters are no further than they were on the day when Geoffrey first beheld Dolly, after so many years, in the preceding week.

Joan, who arrives quite prepared to offer congratulations, and expecting to find Geoffrey and Dolly almost, if not altogether, engaged to each other, is grievously disappointed at the very apparent standstill in her cousin's affairs. She is so happy herself in her new-found joy that, with her usual impetuosity, she wishes to make her friends the same; instead of which, to her dismay, she finds Dolly with dark rims round her eyes, and a face grown perceptibly thinner since last week. There is no doubt about it: she must take the matter in hand. It shall be her last act of interference before she becomes Lady Rushbury, but interfere she must.

So after luncheon she takes her cousin aside, ostensibly to talk about her own engagement; in reality, to pave the way for Geoffrey. With a woman's ready perception, she knows exactly where to lay her finger on the wound that refuses to close; and she does not shrink from the task of seeking to heal it, even if the operation be painful.

"It is not given to every one," she says, plunging boldly into the subject, whilst a strange new softness and dreaminess is perceptible both in voice and manner, "to retrieve such an error as I once made, Dolly, in throwing away the love of a man like Rushbury; but, believe me, when such an error is past redemption, you rue it to the last day of your life."

Dolly looks up inquiringly, but says nothing; and Joan finds her task harder than she had anticipated. To preach a sermon, with herself as the text, is not congenial to her; but, nevertheless, she perseveres bravely, though, owing to circumstances, she is forced to be a trifle irrelevant.

"Fancy," she continues, "what any good-hearted girl's feelings must be, when she finds out that owing to her—her caprice—yes, caprice—a man, whom she by no means dislikes, has lost his interest in life—that everything is to him unprofitable and tasteless."

"Is it always caprice?"

The words come out with a hollow sound, as though forced from far-off depths.

"Well, then, shall I say from a mistaken—most mistaken—sense of duty: a selfish sense of duty?"

"Selfish?"

"Yes, selfish. A girl ruthlessly sacrifices a man and his affections, probably blights his whole life and career, in order that she may hug herself to the end of time with the pharisaical delusion that at any rate, come what may, she has conscientiously done her duty—and so I dare say she has, as far as she herself is concerned; but how about the other side of the question, and her duty to her neighbour? Do not you call that selfish?"

"But you did not behave like that, Joan."

They have been wandering arm in arm, apparently aimlessly, down the drive, and by this time they have strayed through the park-gate, out into the lane leading towards the church, to the very spot where Geoffrey had shot Bruin. Joan has done it purposely. She now stops, and turning, faces Dolly, quick to take advantage of the latter's false move.

"No," she says, with all her old fire and energy, "I did not; but you are doing so, Dolly. No; listen to me patiently"—for her cousin makes a movement of progression—"and when I have done you may go your way. On this very spot Mr. Ingram saved you from a ghastly death; in Rome he exposed his own life to nurse with the tenderest care your affianced husband, and how do you repay him? You know perfectly well that you like—more than like him; it is useless to deny it, for did not I see how you changed colour when first you perceived him last week? You are also aware that he loves you; and yet, in order to go to your grave with the—to my mind—sorry comfort that you have done your duty at the expense of his happiness, you would give him to understand that you will never be his wife."

Dolly has hidden her face in her hands, and, try as she will to control herself, the sobs will come deep and drawn. "You do not know, Joan; you do not know all," she whispers.

"I think I do, Dolly. This is not the first time you have struggled to do your duty. Years ago you were right; now you are distinctly wrong. From what I have heard of your Mr. Leonard, I should say he would be the last person who would wish you to be lonely and solitary for the rest of your life—and, humanly speaking, it is a long life stretching out before you—for his sake. He had the highest opinion of Mr. Ingram; you see, Dolly, I know everything, for I met Margaret Leonard in Switzerland last year, and her expression on the subject was—'He was devoted to Mr. Ingram.' What so natural, so justifiable, as that you should marry the man who saved your life, who did his best to save Mr. Leonard's, who was his and Ferdie's truest friend? Don't cry, dear; don't. I do not mean to hurt you; but, indeed, indeed, I wish to save you future pain!"

"Oh, Harry! Harry!" The cry comes from between her lips, a last appeal and protest.

"Dolly, you have faithfully and truly mourned for the dead; you must now consider the living. Mr. Ingram loves you, how much I can only guess. If he returns to Rome without you, what do you think his life will be to him? He will not sit down and bemoan himself: he is not the man to do that; but by your act and deed you will have taken the sunshine from him, and he will probably never marry. He and you will live solitary lives, and go to your solitary graves, all for the caprice of a foolish girl. There, my dear, is my sermon; now you may go on if you like. But

first of all, look at me," for Dolly is leaning against the hedge, and has hidden her face in her hands. "You silly child! you are breaking your own heart for an idea;" and Joan forcibly withdraws the two little hands, and lifts the tear-stained face to hers.

"Oh, Joan! you do not know how I have struggled and prayed, and fought to do right."

"Yes, I do, dear. Can't I read it in your face? Why, you look ten years older since last week; and I should not wonder if I were to find some grey hairs if I only sought for them. You see, Dolly, I am so very happy myself, that I want every one else to be equally so, and you the first of all, for no one could fail to be happy with Geoffrey Ingram."

A little smile, tender and beautiful as the first green leaf on a spring day, steals over Dolly's face.

"Oh, Joan! if you only knew me, you would think I do not deserve such—such happiness."

"I know quite enough of you, Dolly. If you do not agree in my sermon, write and ask your Uncle Tom. Now we must go back, or Rushbury will think I am lost; and as your eyes are not fit to be seen, you can slip in by the back way, and I will make your excuses for you."

Joan feels that she has done a good day's work as she rejoins the rest of the party, whilst Dolly repairs to her room. On her table lies a letter from Mr. Bruce; but at first she is too agitated to notice it. What if all the sweet words Joan has been so energetically pouring forth are true—that her duty lies with her inclination, and not in the contrary direction? A very heaven of happiness seems to be opening out to her. Only yesterday the truth had begun to steal into her heart, and to-day Joan—dear, dear Joan—has put it into most forcible language. Absently she takes up the letter, and commences idly reading it; but her attention is arrested by the name "Ingram" on the very first page.

"You tell me," writes Uncle Tom, "that Mr. Ingram has found his way to see you at last. I have never revealed to you how often he has tried to do so through me; but, knowing your wishes, I have persistently refused to give him any assistance, feeling sure that, sooner or later, he would accomplish his object. And now, Dolly, listen to my advice, as you always have done all your life. If Mr. Ingram comes to you with a certain request, do not reject it; but follow your inclinations, and be content. Let no morbid fancies stand between you and your duty, for a duty it becomes where two people's affections are engaged and there is neither let nor hindrance on either side. Mr. Ingram is a man to make any woman happy; and, as far as I know, I could not wish a fairer lot for my dear child than to be his wife. Years ago, I did him but scant justice; since then I have made it my business to learn more about him, the result of the inquiries being that Aunt Mary and I shall be truly pleased to greet him as our 'son-in-law.'"

The same tune. Dolly throws herself on her knees, and thanks God that He has loosened the scales from her eyes, and cleared away the mists from her judgment.

Down-stairs the party is in the act of breaking up. Joan has sullied her conscience by telling a distinct fib in reference to Dolly's non-appearance, which has been very calmly accepted by every one. She has had a few words in a corner with Mr. Ingram, on apparently trivial subjects; and now they are all going home.

It is a Saturday—the day that Dolly always arranges fresh flowers on Ferdie's grave. When the house has been quiet some little time, she steals softly down-stairs to find, as she had thought, all the rooms empty, and every one gone out. Soberly, but not sadly, she walks down to the churchyard, past the spot where she has stood this afternoon with Joan. There is no one about. An exquisite sense of repose seems to lie on all around. The cows stand lazily chewing the cud; the little birds twitter softly. Dolly feels its influence stealing over her, the reaction after a struggle, the delicious inaction after warfare.

Ferdie's grave, with its gleaming white cross, recalls to her vividly all her boy's castles in the air as to her future. Are they to come true after all? She will not suffer herself to think, but commences her work—pruning, trimming, adorning—till the little enclosure is bright with asters and nasturtiums. Her labours ended, she turns to go home. Once more she finds herself standing and gazing at that never-to-be-forgotten spot, where she looked a horrible death in the face. Once more she sees Bruin's gleaming eyes and teeth, and hears his low, wrathful growl; once more she is startled by the report of the gun close to her; once more she sees Mr. Ingram by her side: and this time it is fact, not fancy, for he is coming up the road, and is within a yard of her.

He explains that Sir Augustus and Lou are at the Lodge, where he has left them, preferring the fire-side at Wrangham to Mr. and Miss Forester's company. Nevertheless, he seems in no particular hurry to return to that fire-side as he saunters by Dolly's side down the lane, turning her footsteps through the park, up the drive, then to the kitchen garden and the plantation, where they stop to gather some of the many ferns that spring from the banks, and the dead leaves sound crisp and dry beneath their feet.

At first Dolly is shy; but it is a different shyness to what it was yesterday, and it fills Geoffrey with delight as an omen of success. And as they walk along, talking of Joan, the Rushburys, the Stieglitzes, now at St. Petersburg, and from them to many other topics, it wears off completely, and she is, in every sense of the word, herself again. And gradually the conversation takes a warmer tint, more personal, more engrossing, till they are recalled to the prosaic present by the appearance of Lou on the steps of the front door, signalling for them to come in.

The next day is Sunday—a Sunday Dolly will never forget—a day of perfect rest and contentment, truly a Sabbath; and, as yet, there has come no word from Lady Travers to herald her approach, for Lou, who has during this eventful week corresponded with her mother, has never once mentioned Geoffrey's name. On Monday morning, however, Sir Augustus, less

reticent than his daughter, receives a letter from his wife, which causes him much depression of spirit; but of the contents of which he reveals nothing, save that she is coming home late that evening. Geoffrey feels that the liberty of the last week is drawing to a close, for from henceforth an Argus-eye will be on him and his movements. Sir Augustus, too, is uneasy, and seeks to retain his guest with him all the morning; but in the afternoon he turns restive, and avows his intention of doing nothing in particular, save perhaps a little lawn-tennis.

The two girls go about their business, promising to be back in good time; and Sir Augustus, tolerably satisfied that his wife's fears are groundless, shuts himself up in his den, and, lulled by the soporific nature of his business letters, falls asleep.

Meanwhile, Dolly and Lou, having a little business in the village, finish by paying a hurried visit to Miss Forester; and then, bethinking themselves of Mr. Ingram patiently waiting for lawn-tennis, they wend their way homewards. Dolly is in high spirits. Miss Forester had never seen her so before; and her sister catches the infection, for they both laugh and talk, till the drawing-room at the Lodge hardly knows itself for the merriment. Through the plantation, with its russet carpet, lies their shortest way, and they are still smiling over Miss Forester's quaint ideas of matrimony, *apropos* of Joan and Lord Rushbury, when suddenly Lou remembers a book left behind at the Lodge. Dolly agrees to walk slowly on, whilst her sister speeds back for the forgotten volume, promising to catch her up in no time.

She likes to be alone in the plantation: it always brings back to her mind that long-ago stolen interview with Harry. She can see him standing there now, his fair honest face suffused with smiles of delight at once more being with her, his blue eyes dancing with fun at the thought that he had stolen a march on Sir Augustus. So musing, she dallies among the intersecting paths, waiting for Lou when once more she hears a man's footstep behind her; once more her name is spoken—"Dolly"—in accents that thrill her, aye, far more than on that occasion, many years ago, when Harry spoke it. Geoffrey it is who now stands by her side: Geoffrey, who looks into her sweet brown eyes, and holds her hands.

What need to ask what they say to each other? Even the birds on the trees seem to guess it, for from their tiny throats there bursts forth a perfect epithalamium of joy; Lou must have found it out, for she no sooner catches sight of the two together than she turns round to go home by another route. And Dolly forgets all about her sister, about Lady Travers' return, about everything and every one, save one.

Up and down the tortuous paths, in and out of the low brushwood and the tall elms, they wander together, heedless of time, unmindful of aught but the present. They have so much to say, to explain, to tell, to remember, that they may stay there for weeks and yet leave something unsaid. Come together at last! Can Geoffrey but be lavish of the love pent up for so many years? can poor storm-tossed Dolly but be thankful that she has sailed into so fair a haven? It seems almost too much happiness; and when she hears from Geoffrey, Ferdie's last wishes spoken to him, how ardently she longs that her boy were alive to see them realised!

But, even in the midst of his new-found contentment, Mr. Ingram is not unmindful that he and Dolly have covered some three miles or so, as they pace up and down, and that it is time that his darling should rest. Gently, therefore, he turns his face towards the house, promising himself an interview with Sir Augustus before his wife's return—to encounter Lou, who, no longer able to contain herself, comes out to meet them, retaining Dolly, who would have fled at her approach.

"Wish me joy, Lou," he says, with radiant countenance. "Dolly has promised to be my wife."

The very same words Harry had said to Mrs. Bruce on a similar occasion.

CHAPTER THE FORTIETH.

WEDDING-BELLS.

WRANGHAM had not been so gay for many years as when, one bright January morning, two brides issued from the Manor House, to be joined, for better, for worse, to two men who had waited for them patiently for many a long year. It had not been without difficulty that, in the case of Geoffrey and Dolly, this desirable culmination had been brought about. When Lady Travers returned home to find that the result of all her manœuvring and plotting had been destroyed in one short week, she vowed in the heat of her unusual anger to Sir Augustus that she would never leave home again. The vow was useless, for the mischief was done; and even she, with all her cleverness, did not see her way to undo it. Yet she would not give in at once. Many protests—lack of fortune, and so on—were produced, only to fall beneath the stronger will of Geoffrey Ingram. When it came to the settlements, and Dolly, for the first time, learnt that by the provisions made at her mother's marriage she came in to £50,000 on her wedding-day, painful as was the process, she could not but have her eyes opened to the real reason of the opposition to her union with Harry. It came like a blow to such a warm and generous nature; and it was a comfort to her to look on a brighter side of human nature in her future husband. Willingly would she have bid her father keep the £50,000 he held so dear, but that her trustees were less Quixotic, and that there was also Geoffrey to be considered. As for him, he said very little on the subject to her, and still less to Sir Augustus and Lady Travers, but both felt that they had forfeited the respect and esteem of one of their best friends and their future son-in-law. So with some clouds, but much sunshine—the sunshine of a union in every sense of the word—the marriage was consummated, and Geoffrey and Dolly made man and wife.

They were not, however, left alone to play the part of hero and heroine of the day, for at the same time

and place, and from her uncle's house, Joan gave her hand to Lord Rushbury.

* * * * * * *

Four years have passed away since then, four years of perfect happiness to Geoffrey and Dolly, marred by Rose's final separation from her husband, Bob's fastness and extravagance, Augustus's ill-health, and many others among both relations and friends—but they have only served to draw them closer together, whilst widening out their hearts to their fellow-creatures.



"'WISH ME JOY, LOU,' HE SAYS" (*p.* 712).

only one drawback, as far as they themselves are concerned—Dolly's strength has not returned with matrimony. Always obliged to be careful not to overtax herself, it only adds a fresh incentive to her husband's care for her; and even her two boys, Harry and Ferdie, babies as they are, seem to have learnt from their father that "mother" is not to be mercilessly hugged and mauled, but to be treated as something very precious.

Troubles they have had—the troubles of others—Their delightful suite of apartments in Rome is laughingly called the Sanatorium, for thither comes in turn any member of the family, any friend, who may need change of air, or long for a winter away from the fogs and damp of England.

Their last visitor was Margaret Leonard, thin, angular, sensitive as ever, keenly alive to the fact that she was the possessor of a large property and fortune, and at the same time of an unprepossessing appearance, and whilst longing hungrily for such a love as

Geoffrey gave Dolly, eyeing with suspicious distrust every man who ventured to approach her.

So a few weeks ago she returned to Holme Regis, to bury herself, as her father had done before her, in her library, to write clever and eccentric articles in favour of the emancipation of her sex, and to await with impatience the time when Geoffrey and Dolly and their two boys should pay her their annual visit.

But that visit was never to come off, for before the July sun had turned the green corn the palest yellow, Margaret's restless solitary soul, burdened with riches that were distasteful to her, and longing for a love that was denied her, had passed away.

This time it was Mr. Bruce himself who met Geoffrey and his wife as they landed at Dover, too late for the funeral, but very anxious to learn from him all the particulars of the poor girl's death: how that, taking one of her long solitary rides, against which she had so often been warned, and in which she so greatly delighted, her horse must have taken fright at something—possibly the railway train—and have thrown her. Whatever the cause, she was found, late in the evening, lying in a solitary country lane, not far from the line, just alive, and that was all. Borne carefully home, she had lived through the night, tended by all that thought and money could procure, to die, as Harry had done, with the first rays of morning light.

So much Uncle Tom, with many a sad detail of interest, told Dolly and Geoffrey before their arrival at the Vicarage; but not till the next morning, when they were rested, did he reveal to them the important fact that by Margaret's will, drawn up with every legal formality, Holme Regis, with all its demesnes and appurtenances, and money sufficient to keep it up, was left to Dorothy Ingram, and to her eldest son after her, "in compliance with the wishes of her beloved brother, Harry Leonard, whose surname she was to take in conjunction with her own."

And here we may as well bid farewell to Geoffrey Ingram and his wife, seeing that we leave them at Holme Regis. Not, however, till they had sought out every remote Leonard relation, and found that the very few existing were old people in a humble class of life, amply, even magnificently, provided for by Margaret's will, would they consent to enter upon the enjoyment of a property which had come to them through so much pain and trouble. As long as they lived it always seemed to them as though they were holding it in trust for Harry, and every improvement, every alteration, was dedicated to him.

As years sped on, and his memory ceased to give any pain, few people felt that there was cause to regret the day when Holme Regis passed once more into the hands of its former owners, the Ingrams—now become, by a different fulfilment of Mrs. Burslem's castle in the air, the Leonard-Ingrams.

THE END.

LONDON FOGS.

BY AN AMATEUR OBSERVER.



THE dreadful fogs which characterised last year have not yet been effaced from the memory of the inhabitants of London. Every one is anxious to prevent if possible the recurrence of the evil, but how is the difficulty. Some suggest stoves that consume their own smoke, but there are such obstacles to this course being adopted, that they may without exaggeration be termed insurmountable. Let any one take an Ordnance map of London and glance at the thickly crammed portion lying to the eastern side: streets crossing and recrossing in a confused labyrinth, and each of these streets holding hundreds of poor people, living almost from hand to mouth. To prevent the fogs by means of the smoke-consuming stoves, *every* house in this labyrinth must be furnished with a new stove to consume its own smoke. How are either the people or the landlords to stand the enormous expense? From the East-end of London all our fogs come, and that would have to be the cost of our freedom. May not the remedy, to some, be worse than the disease? Another plan is advocated, and seems more feasible. There is a particular kind of coal which burns with little or no smoke, and this might be exclusively used—by those who can afford it—but look at those who can afford but the cheapest, commonest fuel. How would they manage? If all the West-end of London burnt this coal and the poor burnt the old sort, where would be the good? We should still have our dusky torrent of fog streaming up, mitigated no doubt in a trifling degree, because it would receive no reinforcements on the way up as it does now, but in London properly speaking there would be no material advantage.

Some time ago an ingenious Frenchman wrote to the papers, and suggested that if a balloon was sent up during the thick of a London fog from Regent's or Hyde Park, and a person in the car dropped a package of dynamite, the force of the explosion would cause a rift in the fog, and the air rushing in would disperse it. We are afraid that the windows in Park Lane or Bayswater would suffer more than the fog, and unfortunate persons crossing the park would be

considerably alarmed. A balloon ascent during a bad fog would be very interesting, and would allow observations to be made as to the aërial currents and the smoke-cloud.

Leaving theories, however, we come to facts in connection with our subject. Few people, we believe, notice it (but it is a fact proved by our own careful observation) that there are two distinct kinds of London fogs. In the first, the fog *par excellence*, the air is close, heavy, and pungently suffocating, causing the throat to ache and the eyes to smart. In the second, the air is perfectly clear, but there seems a layer of fog suspended in mid-air, varying in colour from bright yellow-orange to black. The thick London fogs are caused by the presence of a heavy white fog in the valley of the Thames—which rises from the marshy grounds during the chilly night hours. This fog prevents the smoke going up, and as the morning approaches and the smoke from the fresh-lit fires comes out, this heavy blanket-like mist acts as a buffer and thrusts the smoke down. As the volumes of smoke increase, the mist and smoke become thoroughly amalgamated and form that plague of London, our text. In the short winter days the sun has no power to pierce the thick veil, which hangs over the City like a pall. A curious fact connected with these fogs is their locality. When there is a regular thick fog in the City, up in the N.W. parts of London the air is quite clear and fine. This is the case when a N. breeze is just stirring. When the wind is S. or S.E. the fogs up at St. John's Wood are very bad.

Fogs lie frequently in belts; in January, 1879, a regular series of bands lay across the West-end; they were not very dense, but they lay in the same places for several days. Then a fresh W. breeze dispersed them.

In January last, a few days after the snow-storm, we had occasion to go into London. The air at St. John's Wood had been heavy, but when we started it was quite clear. Down the Edgware Road, just by the bridge over the Paddington Canal, there was a stationary belt of thick fog. The omnibus seemed as if it was going straight at a black wall. When we were in the middle of the belt, the fog was an olive colour.

Before we reached Church Street, a few hundred yards on, the air was quite clear, and we saw the fog we had passed through behind. Crossing the park that same day, we encountered a slowly-moving belt of fog and passed through it.

The "high" fogs differ from those before mentioned. They cause neither the eyes to smart nor the throat to ache. Objects can be clearly discerned at a good distance. They come up in waves at irregular intervals, and vary in colour from pale chrome to olive-green, or (but rarely) black. Our idea is that the same causes produce them as the others, only that the smoke is arrested in its upward course by a stratum of mist at some height from the earth. This refuses to let the smoke ascend freely, but is not so low as to beat it back on the earth. The wave-motion may be attributed to currents of air just moving the smoke, but not so as to disperse it altogether. These fogs often accompany heavy rain or snow-storms. A remarkably dark one occurred in December, 1876, after a severe snow-storm; about 2 p.m. it became perfectly dark, and the wave of darkness lasted about seven minutes, then it became quite bright; another wave followed, but neither was it so dark nor did it last so long as the preceding one. During both there was no fog, strictly so called; the trees could be perfectly well seen outlined, and the lights a quarter of a mile off. Fogs are also occasioned by the shifting of the wind. A few weeks ago, the wind, which had been E. for some time, veered suddenly to W. The long train of smoke, which had been going merrily no doubt before the wind, suddenly found itself faced and driven back by an opposing current. Back it all came, and what is more, hung over London all day, when in the evening the wind went into the old quarter, and the smoke resumed its interrupted journey.

In this brief sketch of foggy weather, we have just noted down the results of years of careful watching of fogs. We have written down our ideas on the subject as plainly as possible, and hope the study of their phenomena may enlighten some who shut the shutters and light the gas when our November enemy comes.

J. ERSKINE.

"GROWING GREY:" A RONDEL.

BY FREDERICK E. WEATHERLY.

THE wall's warm red is growing grey,
The lichen slowly creeps and lies;
O'er the old house time's finger flies,
O'er gable, roof, and garden-way.
And, darling, there will come a day
When time shall dull thy lucent eyes,
And tinge thy gold hair moonlight-wise;
For all things, love, are growing grey.
Yet check the tearful thoughts that rise.
Have we not love to bless our way?
Love grows not old, love never dies,
Though all things else be growing grey.

A CHEAP AUTUMNAL EXCURSION.

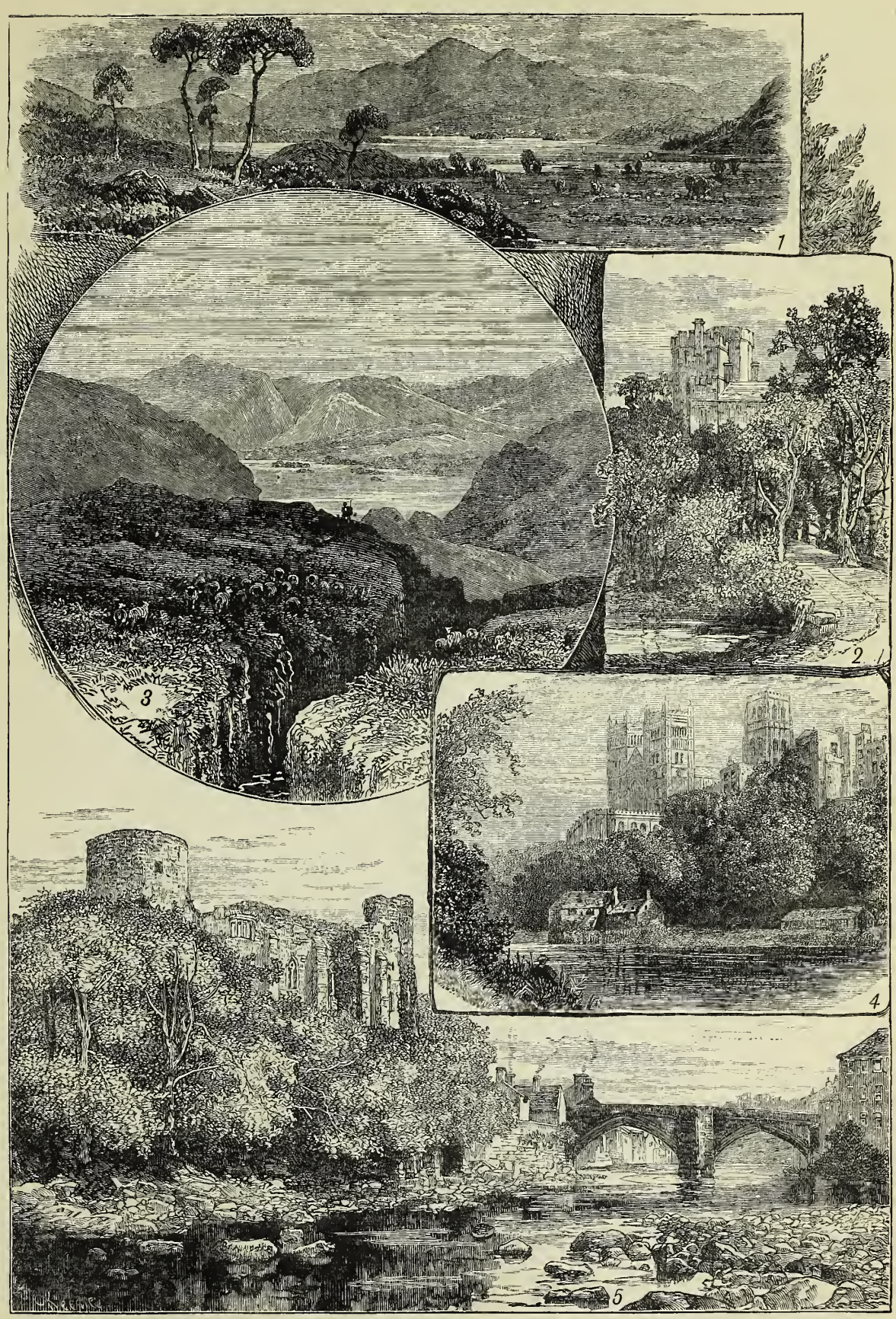


EGGLESTONE ABBEY.

BY what are called "Circular Pleasure Tours," one of the chief English railways is endeavouring to popularise a system of travelling, not new, but less known in this country than abroad. From various points of its line, the North-Eastern Railway arranges eighty tours, some of them duplicates. The cost of the railway tickets or coupons varies from 10s. to £2 5s., according to the distance and to the class. The time may be anything within a month, and any train may be taken; the journey may be broken at any station or all stations on the route, but that route or its reverse must be followed. The object is a pleasure-tour of part of the district served by the North-Eastern Railway, and it affords, as one example will show, a cheap autumnal tour. It may be added that the cost of the tour taken is—first class, £1 9s.; second class, £1 2s.; and third class, 13s. 6d.; that its chief points are from the starting-point of Middlesbrough-on-Tees, to Barnard Castle and Middleton-in-Teesdale, thence across to Kirkby Stephen, and up the Eden Valley to Penrith, on to Carlisle, across by Hexham to Newcastle, down the Team Valley to Durham, and by Stockton to the completion of the supposititious circle at Middlesbrough, so that there is an amplitude of distance and of points of interest. From the south a similar tour, slightly more in cost, may be taken from the starting-point of York or Leeds, or from the north from Carlisle.

Starting from the busy iron-making town of Middlesbrough, sending its clouds of smoke across the Tees, there is scarcely a break in the trading prospect till the Durham shore is out of sight and the ship-yards at Stockton have ceased their clangour. The green fields are broken in upon again at Darlington by ironworks, but a momentary stoppage in the station enables a glance to be given at the famous engine the town is proud of, "Locomotion," which stands on a pedestal in front of the station, and which in 1825 opened this the first public railway. We diverge from "the little coal line" of nearly sixty years ago, and keeping near the Tees, proceed with that slow movement the North-Eastern prefers on its branches, through a well-wooded domain by Gainford and near "Proud Raby's battled towers," to Barnard Castle. Here a stay of a day may well be made. Deepdale, the banks of the Tees down to Winston and up to Cotherstone attract our attention; the noble mansion in course of completion for a Bowes Museum is worth a visit; and with Egglestone Abbey, Mortham Tower, and the birthplace of Wycliffe at hand, the day is all too short to see ancient hall and modern mansion. From hence up the Tees Valley to Middleton-in-Teesdale is half an hour's run, but in this quiet little spot the scenery compels a longer stay. The town itself is one of the head-quarters of the lead-mining industry, and seen from the station it presents a fair sight; but it is in the scenery to the west that its attractions lie. Beyond this, amidst bleakness the river churns itself through to Caldron Snout; and still further, there are bold hills and dark moors that, empurpled with heather, delight the eye. Returning to Barnard Castle, or walking across the moor from Cotherstone to Lartington, where at the ancient Hall there is a fine artistic collection, we again cross eastward, over the high moors in which Bowes revives the memories of the old ballad of its hapless lovers, and the later story of "Dotheboys Hall," one of the last houses seen as the village is left behind. Close to Barras, the highest point in the line is reached, and a little further on the right the Eden Valley opens out at Kirkby Stephen, where a short stay may give facilities for visiting Brough Castle, and some of the fells. There is sylvan scenery up the Eden Valley to Penrith, where a further stay may be made. The old castle gives close to the station a fair prospect, and the Beacon Hill a view of many mountains from Saddleback to Helvellyn, whilst the "Giant's Grave" in the churchyard, and "King Arthur's Round Table," are amongst the sights that Penrith shows; and five miles away Ulleswater commences its serpentine windings. From Penrith to "merry Carlisle" is only a short journey, where castle and cathedral invite the gazer, and many memories compel a stay in the town. Two miles off is Naworth Castle, the scene of the exploits of "Belted Will" Howard, and the whole district is big with the memories of Roman remains, and of moss-troopers' raids. Gilsland has its spa, its old camp, its crags, and many fine views; and from Greenhead Station, Blenkinsop Castle and the ruins of Thirlwall may be viewed. Hexham, in its gardens, furnishes an indispensable stopping station; and the old Abbey Church—one of the earliest of the stone churches in England—and the scenery near the river (especially the "Devil's Water") are worth a visit. Corbridge has its hoary castles, but time presses, and Wylam, the birthplace of George Stephenson, and the quaint village of Winlaton must be passed by, and Newcastle is at hand, busy and bustling.

A diversion should be made down the Tyne, to view the wonderful works that have made the banks of that river one of the great centres of British industry,



1. DERWENTWATER AND SKIDDAW. 2. NAWORTH: "BELTED WILL'S" TOWER. 3. DERWENTWATER, FROM SCAFELL.
4. DURHAM CATHEDRAL. 5. BARNARD CASTLE.

and that give it (with the exception of a mile or two near Bede's old church at Jarrow Slake) the appearance of one great dock that passes through factories and forges. The ship-yards on the Tyne, the mines, the river-works, the great engineering establishments would claim many days to visit and can be only glanced at. Coming away from this industrial hive, the ancient town of Chester-le-Street—once the seat of the episcopal See of Durham—is passed, and after a protrusion of the coal-mining district, the scene is at hand where Cuthbert's

"——— cathedral huge and vast
Looks down upon the Wear."

Durham may be made the last point of sojourn, and the restored cathedral, some of the churches, the beautiful banks of the river, the fine ruins of Finchale Abbey, and other sights will form a fitting close to the pictorial part of the district before the coal-field is trenched on near Ferryhill, and industry swings its hammer in the ship-yards and rolls its iron at Hartlepool and Stockton. The tour affords a variety of scenery, the industrial level of the east giving place to the bleak moors and cold hills of the west, the pastoral Eden Valley, the hilly background of Penrith with its embosomed lakes, scenery of the Border ballads, the early homes of the engineers on Tyneside, and the diversified scenes from cathedral to coal-field of the fruitful county of Durham. It has its different phases of character, it affords many points from whence the lakes may be visited in detail, and it is one of the districts that most fully justify the "circular" visitation that is provided for by a system which might be with advantage extended to other parts of England.

PRACTICAL HINTS ON TAPESTRY-PAINTING.



The art of tapestry-painting is no new work, but has lately been revived with great success. Amongst ladies, with whom all kinds of art-work are the prevailing fashion, it is fast superseding the tapestry-work on frames, on which so many leisure hours were at one time spent. The rapidity and facility with which it can be accomplished is one among its several recommendations. While no one can for an instant hope to rival with tapestry-painting the splendid pieces executed in the looms of the Gobelin or the Beauvais manufactories, still excellent imitations can be produced; and while the price of the latter debars the generality of persons from enjoying its beauty in their homes, the former brings the possibility of adorning their walls with picturesque panels within the reach of many.

Liquid colours are prepared specially for the canvas; they are, in fact, dyes that when applied sink into the material, by which means a durable colouring is obtained. As they do not differ greatly from the ordinary water-colours known by the same names, the amateur has not the difficulty to contend with that will of necessity be found in first attempting the decoration of pottery. Though both kinds of painting possess their several advantages, tapestry, without doubt, is the easier to accomplish, and the artist has only himself to depend on. He can balance his colours, harmonise his tones, and neutralise his effects of light and shade until a satisfactory result is attained; in china-painting, on the contrary, his work is, for a time at least, at the mercy of the man who manages the kiln, the perfection to which it is subsequently brought being due to the firing it undergoes. Such drawbacks, though unavoidable, render china-painting a risky and oftentimes disappointing pursuits.

From a list of about thirty colours the artist will do well to choose a dozen or so, which will be found amply sufficient for a commencement. To lessen any difficulty in selecting the most useful, we may mention the following:—Cobalt, Prussian blue, turquoise-blue, végétal green, Hooker's green, crimson lake, vermilion, light chrome, cadmium, raw sienna, sepia, and black. As canvas of several qualities is to be procured, the artist must first decide as to the kind of work he intends to produce. A rough canvas is suitable for large showy pieces, and beautiful effects are secured by its appropriate use, but it is difficult to cover. The finer kinds are useful when it is important that delicate outlines should be perfectly executed, as they afford the necessary smoothness of surface; but a medium texture is, without doubt, the easiest for an amateur in his first attempts at tapestry-painting. In colour the canvas also varies, the finest being a soft buff shade, while the rough plaited sorts assume a brownish tint. The width of the material allows of its being used without joining for curtains and wall-hangings. It requires stretching in the same manner as canvas for oil-painting, but that can be done at the artists' colourman's where it is obtained. An embroidery frame will satisfactorily take the place of the stretcher if preferred, in which case the canvas is tacked across from side to side with strong thread or twine. Hog's-hair brushes are employed, with sable for finishing; round hog's-hair tools, flat at the end, are sold for working in the background and drapery. Several brushes should be at hand, for if the artist has constantly to wait while he cleanses his brushes, it not only greatly retards the work, but causes him to consider the process of tapestry-painting far more tedious than it is in reality.

The design is first sketched in with charcoal, and

should be entirely completed before the painting is commenced; any superfluous charcoal is dusted off, and the sketch is outlined with colours to preserve it. Soft shades of the colours to be used in representing the various objects should be used, such as green for the trees, so that they may be easily merged into the after-painting. When a decided outline is required—and it is often an improvement to decorative work—brown is most useful; but it is well to leave such outlining for the finishing process, as it is apt to get blurred and uneven during the working.

Tapestry-painting may be regarded much in the same light as water-colour drawing: the lights are left clear, no white being used; one colour is softened into another, and in such blending of shades consists the great charm of the painting. All tints dry lighter than when first washed in; two, and sometimes three washes are necessary before the requisite depth of tint is obtained; allowance must therefore be made for the absorption of the canvas in preparing a shade. The best plan is to mix, in cups or saucers, different strengths of the colours for the several washes. Darker shades should be put on first, so that the lighter may be blended into them. If the light colours are washed in first, the dark shades run into them, and may probably spread too far, and when such is the case there is no chance of complete alteration. Being dyes, the colours cannot be removed; the work must in consequence be proceeded with carefully. A tint, if not allowed to dry, may be partially lightened by washing out with plenty of water; but it cannot be entirely eradicated. Sufficient colour should be mixed at once for an entire wash. If a portion is commenced, and the worker has to leave off to mix more, he will find that a hard line is left on the canvas by the abrupt interruption, which there will be some difficulty in getting rid of. Especially with the sky is this precaution important. Several hues should be mixed before commencing to lay on, that each may be blended into the other as occasion demands.

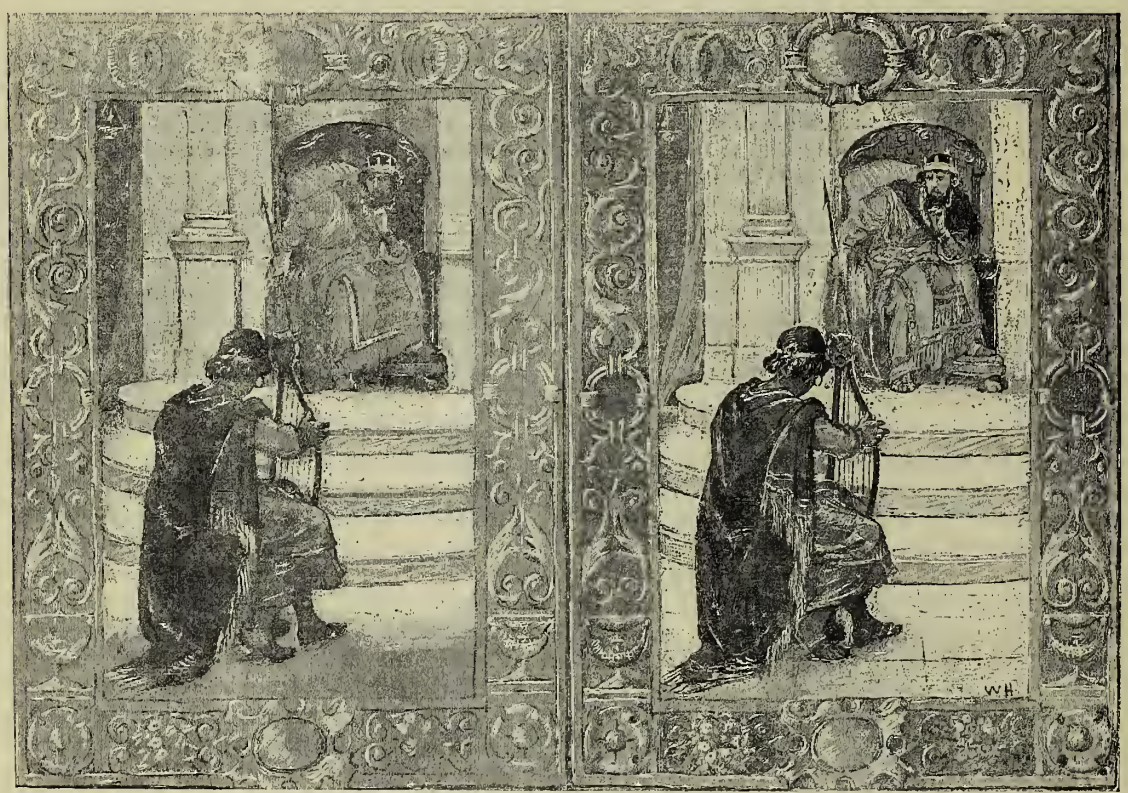
Cobalt is good as a first wash; while pink madder, or carmine, with cobalt or French ultramarine, will produce soft grey for the light fleecy clouds that fleck the summer heavens. The warm hues that tint the horizon may be produced with pink madder, chrome, and cadmium; the sea-green, with cobalt and chrome greatly diluted. Above all, there should be no hardness, no harsh contrasts. The true representation of even the simplest sunset is no easy task; but when the summer sun descends behind clouds of brilliant orange, fiery crimson, and rich purple, that shade through infinite gradations of colour to lose themselves in the vast expanse of cool, pearly blue-green, the greatest master the world has ever known would surely have declared the task of truly depicting the scene in all its wealth and loveliness to be beyond his highest powers. No pigments are brilliant enough, none pure enough with which to portray one such sunset as we may see day after day unfolded before us. The green for leaves of trees is formed by mixtures of blue and yellow. Prussian blue is a useful colour, and with it and burnt sienna a good green may be produced. Cadmium may also be mixed with it advantageously for a rich green. Emerald-green is good to mix with other colours, such as Prussian blue, cadmium, or burnt sienna, but should be used sparingly alone. The backs of leaves are often of a light tone of colour; in these instances light chrome with blue is used. Hooker's green is valuable when added to yellow. Raw sienna, indigo, and a little chrome will be found suitable for painting some trees. An olive-green is made with Prussian blue and raw sienna.

The mention of how a few greens can be found may be of some little assistance to the worker; but it remains for him to determine, while mixing on his palette, the shade he requires, and the proportions of the colours he employs. For example, more blue gives a blue-green, more yellow a yellow-green; but experience and a close imitation of nature will alone enable him to produce such tones and hues as he sees revealed everywhere around him in woods and fields. The shadows in the trees being rendered in a warm brown causes the depth and intensity of the darker parts of the foliage to appear more real. Browns are formed by mixing purple with green, orange with purple, and green with orange. Vandyke brown and yellow ochre will do for stems of trees, sepia for the darkest shadows on the trunks. Rose-pink added to brown will give a warm tint that is often required. An old ruined wall, or portion of a castle, forms a picturesque object; it serves as a foil to the bright tints of foliage and sky, and cools the picture if too vivid in colouring. Sepia and cobalt make a fine grey; carmine and French ultramarine, or pink madder and cobalt, a soft pearly grey, useful for assisting the blending of colours. The foreground may have a first wash of raw sienna, the several objects being afterwards made out in greys, greens, and browns. In the middle distances greyish greens and browns predominate, while the extreme distances present somewhat stronger tones of the sky tints. The painting will require to be gone over twice, or even oftener, until the several parts bear a right relation to each other: one may need cooling, another strengthening, while yet another will be the better for some dark strong touches, to give force and solidity. On these dark touches, put in at the last, the reality of the representation hinges; they make the stones to stand out of the foreground; they raise the weeds from the pathways; they cause the rocks to look rugged, the tree-trunks gnarled and old. Still they should be put in with discretion, as much depends on the positions they occupy.

So far landscape-painting has been chiefly considered, but each worker should follow the style in which he excels, whether it be landscapes, figures, or flowers. In figure-painting the artist will have to depend chiefly on the draperies for his effects of colour, and these may be of the richest. A few, well chosen, will show to greater advantage than a multiplicity of hues. Orange-coloured drapery should be laid on in the following manner:—First, a tint of cadmium is washed over all; it is allowed to dry, and then a wash of carmine is passed over it; the shadows should be carmine modified with sepia. Vermilion is

improved in tone by the same means; its acknowledged heaviness and dulness is brightened up considerably by a first wash of yellow; its shadows are of lake and sepia. Crimson lake, with tints of yellow ochre, black, and vermilion, is useful as a drapery; burnt umber, black, and vermilion will make its deepest shadows. The chrome yellows are brilliant, but not to be counted on for durability; they are, however, good for vivid touches on yellow. Of greens mention has already been made; the shadows should be warmed with red, brown, or lake, mixed with sepia. French ultramarine is shaded with Prussian blue, but it is not desirable to use blue in large masses; its shadows may be warmed with a brownish tint. A negative blue is often found more satisfactory than the pure colour; a mixture of emerald-green with Prussian blue forms a good compound tint. Purples are composed of red and blue; lake and indigo, or carmine and French ultramarine, will produce rich dark purples, carmine and cobalt a lighter shade, while rose-pink and Prussian blue will give yet another tint. After the flesh tints, which may be composed of rose-pink and light chrome, and the hair are washed in, the folds of the drapery are made out in simple gradations of the tints to be afterwards used. They should be put in lighter than they need to be when finished, as it is easy to give them another wash if, when dry, they are seen to require it.

A clever artist will make the most of the reflections the draperies receive, and by working various tints into the shadows he will avoid the monotony that is the destruction of artistic colouring. But in tapestry-painting, as in all work done for the sake of decoration merely, the colours should be as few as it is possible to use consistently with the desired effect. If the imitation of tapestry-weaving is the worker's object, he will need to be the more careful that he attends to this point; but the modern style of tapestry-painting allows of greater indulgence in various colours, the painter has it within his power to employ any shade that can be mixed to suit his purpose. Still it is worth remembering that the richest colouring is often reached through a simple palette. True art is not attained by multiplying colours, but rather by the employment of judicious contrasts, and subtle harmonies, that serve to bring out the highest beauties of a few until they present a combination perfect and melodious. In contradistinction to many other kinds of decorative work, it admits of the design being in a somewhat marked manner pictorial.



SPECIMEN OF TAPESTRY-PAINTING.

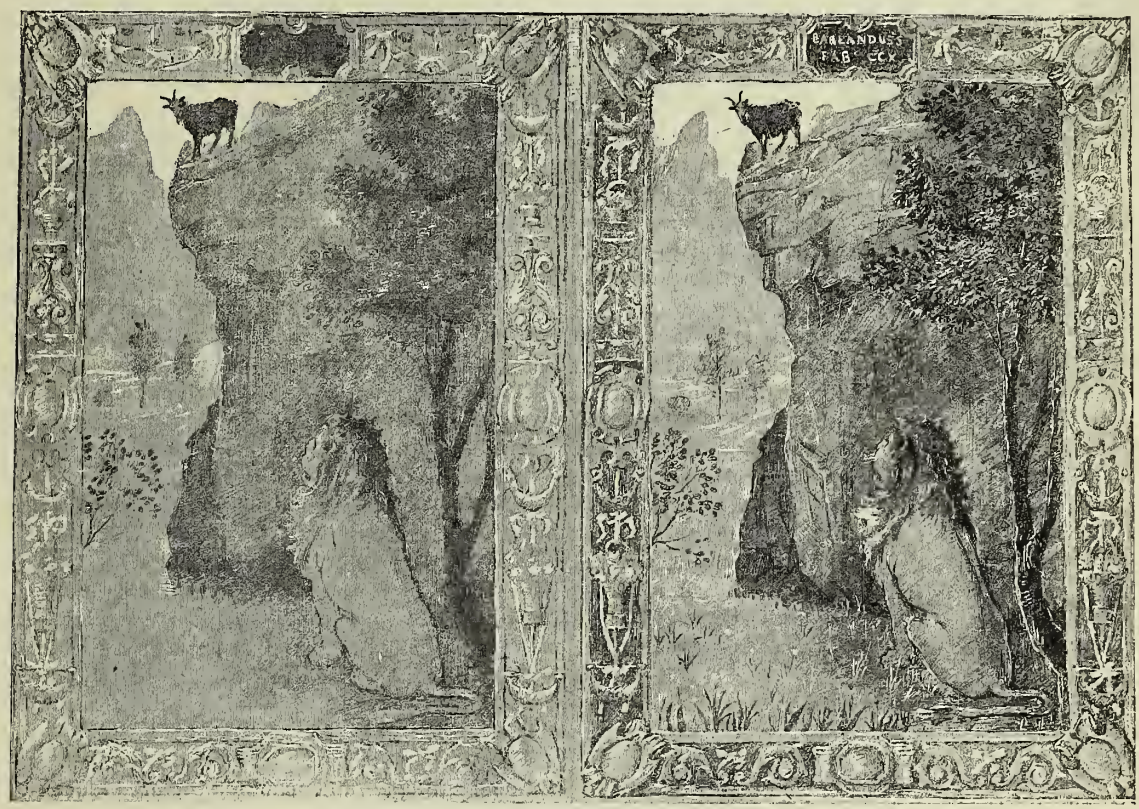
(*Unfinished.*) (*Finished.*)

Many decorations are artistic only when they are to a certain extent conventional, but in tapestry panels, which at times take the place of pictures, less stringent rules are followed. In old tapestry, emblems, badges, and heraldry were constantly used to carry out the conception; the borders bore repetitions of shields and medallions at the corners, while small designs filled the intervening spaces. In painting a panel, the position which it is ultimately to occupy should be considered, in order that the style may

agree with the surroundings; so, too, in painting furniture coverings the colours and designs should be in accordance with the decorations of the room. That the work can be turned to good account in covering chairs and sofas is a great attraction to many ladies; needlework is so tedious, such a long time elapses before any show can be made, that painted tapestry was sure to win favour as soon as it was revived. The threads of silk and wool make the work fragile, and London smoke soon soils the delicate shades, while London dust clings closely to the congenial surface.

Although to some painted tapestry will never appear quite so beautiful as the old-fashioned needlework, yet its advantages are clearly apparent. The canvas is strong, no threads cover it that will easily wear away; the colours are fast, so that, much begrimed as the article may be, it can be washed; the surface, being fairly smooth, does not readily collect great quantities of dust. The sinking of the colours into the canvas renders the painting permanent, and as no body colours are used it remains soft and pliant. If the artist should find any difficulty in getting the canvas to take the dyes, he has merely to paint over the back with clear water; he will then find that when he washes on his tints they will be rapidly absorbed. A decoration may be executed in oil colours, but the canvas does not retain its flexibility when they are employed; they require to be diluted with turpentine or they will not penetrate through the material. When liquid colours are used, oil colours are sometimes added during the later processes of painting.

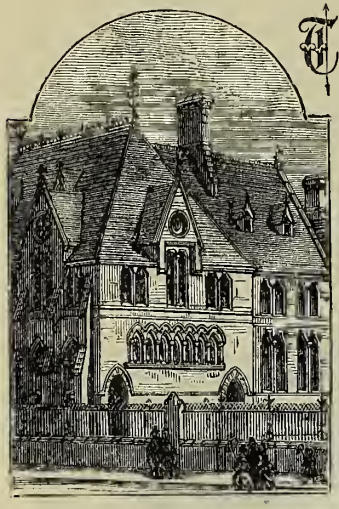
Elaborate borders may be improved by the introduction of gold; for panels it is suitable, as it will not then be subjected to friction. The method of laying on gold is as follows: coats of shellac varnish are laid on the portions of the canvas to be gilded; these must be allowed to soak into the ground until every part is thoroughly saturated; it must then be left to dry, carefully protected from dust. Now and again it will have to be tried with the finger to find out if it is in a fit condition for the gold to be applied; it is ready when it feels "tacky" to the finger, or when it is nearly dry. The worker should by this time have his tools at hand; he will need a gilder's cushion, on which the gold-leaf is spread out and cut into convenient-sized pieces. He first blows some of the leaves from his book into the cushion, and, after cutting them to the requisite shape with a gilder's knife, he lifts each one with a gilder's tip on to the work, until the whole space is covered; next it is all pressed down gently with a mop, or dabbler, and afterwards the superfluous gold is dusted off with a badger. Tapestry-painting will be found a pleasant, agreeable pastime. It takes the place of fancy work for many necessary articles, and no one need feel to be spending their time uselessly who can produce a well-painted screen, curtains, furniture coverings, or wall decoration, for in making a home more beautiful and more comfortable time is always well spent.



SPECIMEN OF TAPESTRY-PAINTING.

(*Unfinished.*) (*Finished.*)

THE VICTORIA UNIVERSITY.



THE fact that a new avenue to a degree is open to all who are desirous of obtaining a University distinction, that a new University in the North of England is now in full working order, cannot but be of considerable interest to many of the readers of this Magazine. The Victoria University, Manchester (some account of whose origin was given about a year ago*), has recently issued its scheme of examinations, and it is felt that a little space may well be devoted to a consideration of the regulations, fees, and other points of interest.

The seat of the Victoria University is at the Owens College, Manchester, which college is the first unit in the federation of colleges contemplated by the charter. It will be remembered that the foundation of this new Northern University was mainly owing to the action of the Owens College in endeavouring to obtain for itself individually the constitution of a University, and that when the claim of the authorities of the college was modified into a petition that a federal University might be founded—which petition was concurred in by the Yorkshire College at Leeds—a Royal Charter was granted, bearing date April 20, 1880.

By this charter the University was to comprise certain colleges, fulfilling specified requirements, and conforming to definite regulations prescribed by the charter; and of these colleges, Owens was to be the first. Without travelling any further over the ground occupied in the previous paper already referred to, it will be sufficient to say that at present Owens is the only college in the University, and that the various regulations for the government of the University, the composition of the University Court and Council, &c., appear to have been rigidly carried out. It is more to the purpose now to enter upon an examination of the published regulations for courses of study, examinations, and degrees.

Although endowed with considerable powers, the University has not yet taken full advantage of them, and there are at present two faculties only—Arts and Science. The degrees in these faculties comprise Bachelor and Master of Arts (B.A. and M.A.) and Bachelor and Master of Science (B.Sc. and M.Sc.) while there is a Doctorate common to both faculties, and varying as Doctor of Literature, Doctor of Philosophy, and Doctor of Science. The avenue to these degrees consists in matriculation—that is to say, in placing the name of the student upon the register of scholars of the University—since none but matriculated students may proceed to graduation.

Each student, on presenting himself for matriculation—either in June or in the Michaelmas term of each academic year—is required to furnish to the Registrar of the University a certificate of his admission as a student of one of the colleges of the University,† to pay a matriculation fee of £2, and to sign an undertaking to obey the regulations of the University. The first of these regulations sounds the key-note of the whole system at the new University. Graduates are to be students of the University or of one of its component parts, and are not to be merely examinees, as at the University of London; they must go through certain prescribed courses of study, just as at the older Universities, but residence will not be required of them.

Scholars of the University may obtain either an ordinary degree of Bachelor of Arts or Bachelor of Science, or an Honours degree. In either case, what is known as the Preliminary Examination must first be passed; after this, for the ordinary degree there are two examinations—the Intermediate and the Final—but for the Honours degree only one.

The Preliminary Examination is held twice a year—in June and October—and candidates are required to present themselves at it not later than two years from the date of their matriculation, except under special circumstances. All candidates must furnish certificates of attendance upon an approved course of instruction in a college of the University—the particulars of such courses being obtainable from the college authorities.

The subjects of examination are arranged in two optional groups, and candidates are required to satisfy the examiners in five subjects from either Group A or Group B, as follows :—

A.

(1.) Latin—including (*a*) one prose and one verse book from the following :—Virgil, Ovid, Horace (*Odes*), Cæsar, Sallust, Livy, Cicero (easier works); (*b*) Grammar; (*c*) Translation at sight of an easy Latin passage into English; (*d*) Translation of easy sentences from English into Latin.

(2.) Greek—including (*a*) one prose and one verse book selected from the following :—Xenophon, Homer, Euripides; (*b*) Grammar; (*c*) Translation at sight of an easy Greek passage into English.

(3.) English Language and English History (with Geography)—comprising (*a*) Elements of English Grammar; (*b*) Composition; (*c*) Elements of General History of the English Language; (*d*) Outlines of English History from the earliest times; (*e*) Elements of Political Geography, especially of Great Britain and Ireland.

(4.) Pure Mathematics—including (*a*) Plane Geometry and Euclid, Books I.—III., and Bk. VI. Props. i.—xix. and xxxiii., or the subjects thereof; (*b*) Elementary Algebra.

* "Two New Universities," in CASSELL'S FAMILY MAGAZINE for July, 1880.

† That is to say, for the present at any rate, he must be a student of the Owens College.

(5.) *One* of the following :—

i. French—including (*a*) Grammar ; (*b*) Translation from a French work ; (*c*) Translation at sight of a piece of French prose into English ; (*d*) Translation of an easy English passage into French.

ii. German—including (*a*) Grammar ; (*b*) Translation from a German work ; (*c*) Translation at sight of easy German prose into English ; (*d*) Translation of easy English sentences into German.

iii. Experimental Mechanics—including Properties of Bodies, Statics, Kinetics, and Hydrostatics, treated so as to require only elementary knowledge of Algebra and Geometry.

iv. Elementary Chemistry—comprising Laws of Chemical Combination ; Chemistry of the Non-metallic Elements and their Compounds.

B.

(1.) English Language, History, &c. (as in Group A).

(2.) Pure Mathematics—comprising (*a*) Plane Geometry ; Euclid, Books I.—III., and Bk. VI. Props. i.—xix. and xxxiii., or the subjects thereof ; (*b*) Elementary Algebra ; (*c*) Plane Trigonometry to solution of Triangles ; *or* Practical Plane Geometry (straight line and circle).

(3.) (4.) (5.) Three of the following (either *two* Sciences and *one* Language, or *one* Science and *two* Languages :—

i. Experimental Mechanics (as in Group A).

ii. Elementary Chemistry (as in Group A).

iii. Greek (as in Group A).

iv. Latin (as in Group A).

v. French—including (*a*) Grammar ; (*b*) Translation from a prose and from a verse work ; (*c*) Translation at sight of a passage of French prose into English ; (*d*) Translation of an English passage into French.

vi. German—including (*a*) Grammar ; (*b*) Translation from a prose and from a verse work ; (*c*) Translation at sight of easy German prose into English ; (*d*) Translation of an easy English passage into German.

Candidates for the degree of B.A. must satisfy the examiners in both Latin and Greek at the Preliminary Examination.

Some further idea of the standard in languages required for this examination may be gathered from the announcement of the special subjects for June and October, 1882. They are as follow :—Latin : Horace, *Odes*, Book I. ; Livy, Book II., chapters 1–50. Greek : Xenophon, *Anabasis*, Book VI. ; Homer, *Iliad*, Book XVIII. French : for Group A, Guizot's *Guillaume le Conquérant ;* for Group B, the same book, with the addition of Molière's *Les Femmes Savantes*. German : for Group A, Schiller's *Egmont's Leben und Tod, und die Belagerung von Antwerpen ;* for Group B, the same, with the addition of Schiller's *Jungfrau von Orleans*.

Candidates for the ordinary B.A. and B.Sc. degrees are required to pass through a course of study extending over at least three academic years, corresponding to the Preliminary, the Intermediate, and the Final Examinations respectively, of which years at least two must be subsequent to the date at which they passed the Preliminary Examination. An exception is, however, made in the case of students who pass the Preliminary Examination next after their matriculation, and are placed in the first division : these may take their degree after two years of academical study following the date of their Preliminary Examination.

The Intermediate and Final Examinations will both be held in the months of June and October in each year.

Candidates for the ordinary degree of Bachelor of Arts are required to present themselves for the Intermediate and the Final Examination in each of the subjects in one of the following groups, and to have passed through the corresponding courses of study :—

A [*MAINLY CLASSICAL*].

Intermediate Examination.	*Intermediate Course of Study.*
(1) Mathematics.	Greek.
(2) English Language (History of).	Latin.
(3) English Literature.	Ancient History.
(4) Logic.	English Language.
	English Literature.
	Mathematics.
	Logic.
Final Examination.	*Final Course.*
(1) Greek.	Greek.
(2) Latin.	Latin.
(3) Ancient History.	Ancient History.
(4) Philosophy.	Philosophy.

B [*MAINLY HISTORICAL*].

Intermediate Examination.	*Intermediate Course of Study.*
(1) Latin *or* Greek.	History (Ancient and Modern).
(2) Mathematics.	Greek.
(3) English Language (History of).	Latin.
	English Language.
	English Literature.
	Mathematics.
	French *or* German.
Final Examination.	*Final Course.*
(1) Latin *or* Greek.	History (Ancient and Modern).
(2) History (Ancient and Modern).	Greek *or* Latin .
(3) French *or* German.	English Literature.
(4) English Literature.	Political Economy.
(5) Political Economy.	French *or* German.

Provided that the Classical Language presented at the Final Examination has not been presented at the Intermediate Examination.

C [*MAINLY ENGLISH AND MODERN LANGUAGES*].

Intermediate Examination.	*Intermediate Course of Study.*
(1) English Language (History of).	English Language.
(2) Mathematics.	Early English Language.
(3) Early English.	English Literature.
(4) Ancient History.	Ancient History.
	French.
	German.
	Latin.
	Mathematics.
Final Examination.	*Final Course.*
(1) Advanced English Language.	Advanced English Language.
(2) English Literature.	English Literature.
(3) Modern History.	Modern History.
(4) French.	French.
(5) German.	German.
(6) Latin.	Latin.

D [*MAINLY PHILOSOPHICAL*].

Intermediate Examination.	*Intermediate Course of Study.*
(1) Logic.	Logic.
(2) Latin.	Greek.
(3) Mathematics.	Latin.
(4) English Literature.	Mathematics.
	Ancient History.
	English Literature.
	French *or* German.

D [*MAINLY PHILOSOPHICAL*], *Continued.*

Final Examination.	*Final Course.*
(1) Philosophy.	Philosophy.
(2) History of Philosophy.	History of Philosophy.
(3) Greek.	Greek.
(4) Ancient History.	Ancient History.
(5) French *or* German.	French *or* German.

Candidates for the ordinary degree of Bachelor of Science are required to present themselves for the Intermediate and for the Final Examination in one of four groups of subjects, classified as A (mainly Mathemathical); B (Engineering); C (Experimental Science); D (Biological). In each group, as in the Preliminary Examination, one language at least *must* be taken, thus showing that in this most modern example of a University one of the requirements of a liberal education has not been forgotten or lightly esteemed. It should be added, however, that the language need not be ancient; it may be modern if the student so elect.

It is impossible for us to enter upon a full consideration of the Honours degrees. It will perhaps be sufficient to say that in the Faculty of Arts students have the choice of four Honours Schools—Classics, English Language, History, and Philosophy; while in the Faculty of Science six are open to them, namely, Mathematics, Engineering, Chemistry, Zoology, Physiology, and Geology—including Mineralogy and Palæontology. All further particulars on this subject may be obtained from the published regulations, to be had on application to the Registrar of the University at Manchester.

The degree of Master of Arts or of Science is to be conferred on Bachelors of Arts of three years' standing, after not less than six years from the date of their matriculation. Bachelors who may graduate with Honours will not be required to pass any further examination for the Master's degree; but those who take the ordinary B.A. or B.Sc. degree will be required to pass an examination in some portion of one of the Honours Schools Examinations.

The degrees of Doctor of Literature, Doctor of Philosophy, and Doctor of Science are to be conferred on Masters of Arts or Science who may have furnished evidence of special research or learning, to be supplemented, when desirable, by an examination test.

One word, in conclusion, as to the fees. The following list gives them all, it being understood that no fee entitles to admittance to more than one examination. *On Examination:*—Matriculation, £2; Preliminary, £1; Intermediate, £1; Final, £1; Final Honours (taking the place of Intermediate and Final Ordinary), £2; M.A. or M.Sc., £1. *On Conferring Degree:*—B.A. or B.Sc., Ordinary or Honours, £5; M.A. or M.Sc., £5; Doctor, £10. The total fees for the highest degree can therefore amount to no more than £6 on examination, and £20 on the conferring of the respective degrees, or £26 in all. The fees at London for a Doctorate amount to £22, so that the charges at the Victoria University are practically about the same, and cannot but be regarded as exceptionally low. Of course, at London University there are no stipulations as to study, while at the new Northern University specified courses must be attended. But, all things considered, so liberal in every sense appears the spirit in which its charter has been carried into effect, that we feel sure a great and glorious future lies open to our most modern seat of learning in England.

G. W.

'POSSUM-SHOOTING IN AUSTRALIA.



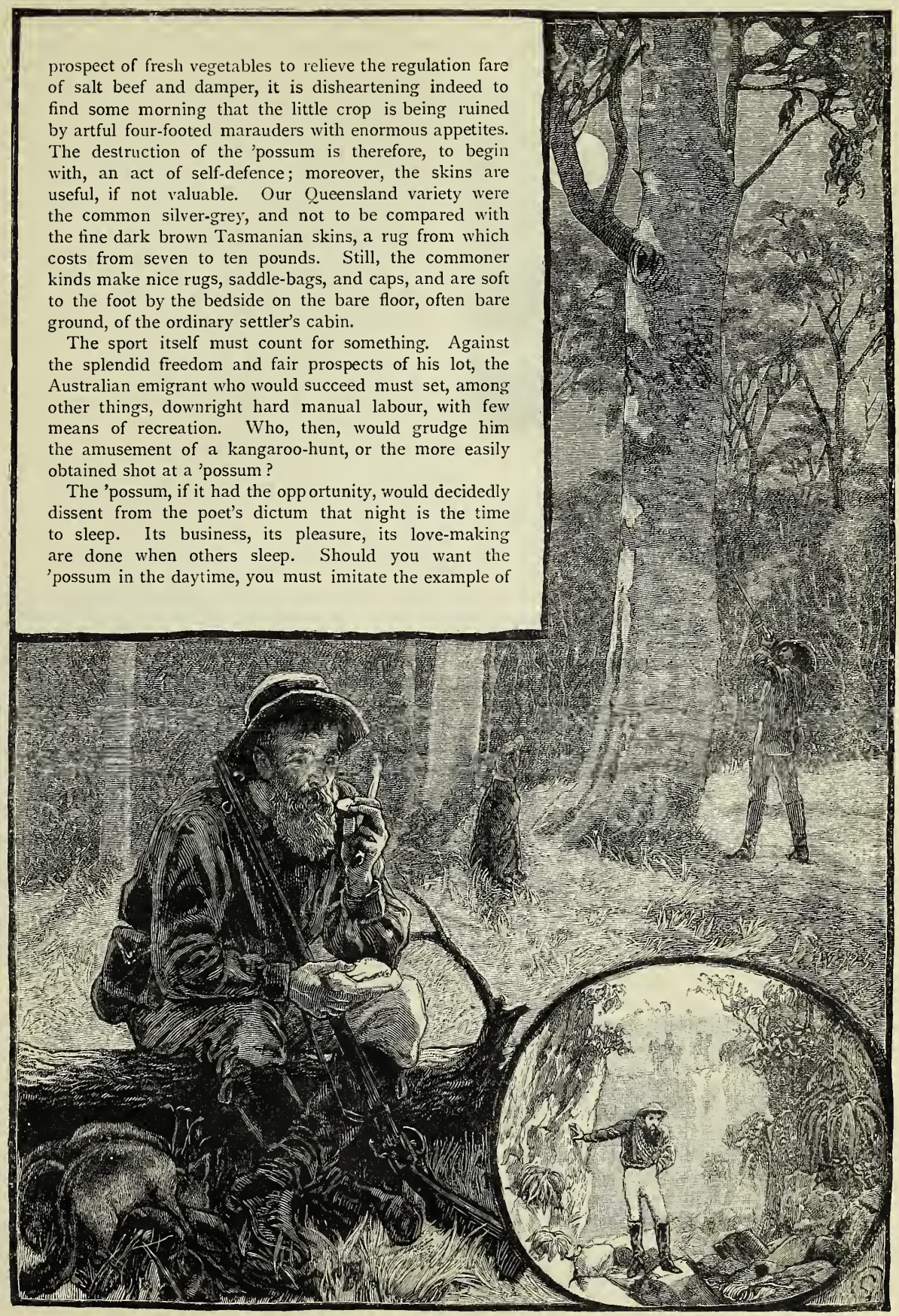
GAME of a description likely to tempt a good sportsman is not very plentiful on the Australian continent. A man equipped to the teeth, and able to engage in an expedition into unsettled districts, may happen to enjoy a run of fortune, and make bags of incredulous dimensions. The settler, however—the man who works hard, and yet would have his occasional recreation with the gun—has not a large variety of game to choose from; but he can always fall back upon the innocent opossum, quite correctly described in the humorous phrase as a "'possum up a gum-tree." Of all the marsupials on the great Australian continent, this is the family which is least frightened away by the habitations of men. The establishment of a township makes little difference to the opossum. On moonlight nights the popping of 'possum-shooting guns may be heard around the suburbs of even cities.

The destruction of the opossum is more justifiable than tame-pigeon shooting. Although the animal breeds but once a year, and rarely produces more than one at a birth, it is remarkably abundant in most of the settled districts. Having a *penchant* for green-stuff in its tender growths, it is, in fact, more plentiful than welcome. Gardening in the bush is achieved only through much tribulation; droughts are bad enough, but the ravages of small marsupials are especially aggravating. After, by dint of real sweat of the brow, the settler has succeeded in bringing his peas, lettuces, pumpkins, or vegetable marrows above ground, so that his wife and children may go out every evening to speculate upon the delicious

prospect of fresh vegetables to relieve the regulation fare of salt beef and damper, it is disheartening indeed to find some morning that the little crop is being ruined by artful four-footed marauders with enormous appetites. The destruction of the 'possum is therefore, to begin with, an act of self-defence; moreover, the skins are useful, if not valuable. Our Queensland variety were the common silver-grey, and not to be compared with the fine dark brown Tasmanian skins, a rug from which costs from seven to ten pounds. Still, the commoner kinds make nice rugs, saddle-bags, and caps, and are soft to the foot by the bedside on the bare floor, often bare ground, of the ordinary settler's cabin.

The sport itself must count for something. Against the splendid freedom and fair prospects of his lot, the Australian emigrant who would succeed must set, among other things, downright hard manual labour, with few means of recreation. Who, then, would grudge him the amusement of a kangaroo-hunt, or the more easily obtained shot at a 'possum?

The 'possum, if it had the opportunity, would decidedly dissent from the poet's dictum that night is the time to sleep. Its business, its pleasure, its love-making are done when others sleep. Should you want the 'possum in the daytime, you must imitate the example of



the black fellow by examining the smooth trunks of the gum-tree, and having discovered scratches which experience soon enables you to understand,



'POSSUM AND YOUNG.

must shin your way upwards as best you can, and seek the slumbering animal in some cosy hollow at the head of the tree. After nightfall it descends to the herbage, and in the silent bush its squeaky chatter is heard on every hand.

A dog is a necessary companion in 'possum-shooting. Poor old Major was the best dog for this work I ever knew. He was a grand Scotch deerhound, scarred with many a memory of kangaroo clutches, and a magnificent hunter. We allowed Major to work for us in perfect confidence. In the bush cottage, where the hound was pet and companion, especially to the children, he would gravely wait prone on the ground whenever a nocturnal expedition was on foot, one eye on us as we drank our tea, the other eye on the guns in the corner. The wise fellow did not disturb himself when the meal was finished, but simply then watched our movements with both eyes; yet, directly we took up our guns he was up and ready. Not a word was necessary. He knew exactly the part he had to play.

In the immediate vicinity of the cottage he walked soberly at heel, expecting, as he always received, a word of love from his master; but in the open paddock he would pause, wag his tail, thrust his long nose into our hands, and of his own accord set off, nose to ground, at his huge loping stride. We could, sitting on a log, hear the crash of the dry sticks as he proceeded. Sometimes he would find game at once; sometimes not. That he would find, if there were anything to be found, we knew, and kept the watch of patience in the truly incomparable moonlight. Perhaps, when the time came, Major's bark would be heard in a direction altogether opposite to the point from which he started, showing what a semi-circle he had described. The barks were short and sharp. He never barked in that way except for 'possum-finding, and he kept on repeating the signal until we were with him. It was the only sound in the vast solitude, and we were guided by it without difficulty.

Major would be found sitting on his haunches, looking with eager straightness up into the branches. A violent thumping of his tail on the grass, and an impatient whine, indicated his knowledge of our presence, but the head was never withdrawn from its perpendicular, nor did he utter another bark. So far he had performed his part, and it was now our turn. Often the 'possum could not be seen; strain our eyes as we would from every side where we could get the object sharply outlined against the moonlight, nothing but leaves and branches could be detected. With other dogs we never wasted much time in a fruitless search. The continuous throwing back of the head and peering upwards wearied the eyes, and it was always possible that the dog had been misled by a flying fox or night-bird. But Major was not to be mistrusted, for we generally paid him the compliment of remaining, and generally found our 'possum at last.

A mature specimen weighs eight or ten pounds, and is larger than an ordinary house cat. The treed 'possum is naturally in a state of alarm. It had been roaming on the ground when the dog approached, and although it looks the reverse of a racing animal, it had scampered at a swift pace, and scuttled out of harm's way up the gum-tree. There it lay, close to one of the stems of the bough. At the height of fifty or sixty yards it looked at first a small dark excrescence, but by shifting this way and that, now advancing, now retiring, but ever with his eye on the object, the sportsman would by-and-by see the large lynx-shaped ears. The rest is a primitive matter of potting. Shoot straight, and the 'possum, in nine cases out of ten, falls immediately with a thud.

Here, again, Major's superiority was exemplified. The uneducated dog would rush at the fallen animal, and so maul it as to spoil the skin. Major, who had maintained his watch and, if possible, sharpened it during the act of shooting, was always on the spot to receive the 'possum, and make short work with it if it attempted to escape. Otherwise he stood solemnly gratified over it, mounting guard till released.

It may be here added, as a last reference to the dear old hound, that he went away into the mountains on a hunting expedition of his own, and never returned. His skeleton was found long after in a dried-up water-hole; and the presumption always was that he had



TEETH OF THE 'POSSUM.

surprised an "old man" kangaroo, pinned him according to his invariable custom, allowed himself to be hugged in the kangaroo's strong fore-arms, and drowned by him. This is not an uncommon habit of the kangaroo at bay.

The 'possum has a strong clinging tail, and occasionally dies with it curled round the branch upon which it received the shot. A pea-rifle is the best weapon for the sport when skins are the object. You can with it shoot at the head, and make one hole only. Few settlers, however, possess a fancy gun of this description. A rusty single-barrel, often of the vilest Brummagem make, has to suffice, with a charge of No. 4 shot shovelled out of the trousers pocket in a pipe-bowl. One of my colonial bush friends used to carry his powder loose in a jacket pocket, and scoop it out in the same fashion, smoking merrily all the while. A youngster in the bush is very careless with firearms, but, however rude his gun may be, he can shoot his eight or ten 'possums during a favourable ramble. The skin should be left till next morning, because the fur comes out in handfuls while the animal is warm.

The young opossum, which often crawls (none the worse for the headlong fall) out of the pouch of the dead mother- makes an interesting pet. It quickly becomes tame, and will run over the house in a mood of happy content. The 'possum is a pretty animal. The face is round, the nose sharp, and the eyes soft and bright. The tail is black and long, but underneath it is hairless and flat, as befits its prehensile purposes. The front teeth are long, and a wounded opossum will inflict a severe bite, and use its large sharp claws with severe effect. Only when absolutely pressed for food will the white bushman eat the flesh. The young animals are said to be passable eating. Dogs, however, do not object to the meat, highly flavoured as it may be with gum-leaf. The aboriginal native regards the flesh as his staple diet, and the little black fellow's first lesson in hunting is to over-reach this wily marsupial. No refinements of cookery or temptations of savoury sauce are lavished on the black fellow's game. He stalks up to the camp-fire, the 'possum swinging by the tail, and casts it as it is on the embers. When half cooked it is torn to pieces by the hand and worried by the teeth of the hungry and degraded aboriginal.

W. Senior.

A FOOLISH MISTAKE.

BY THE AUTHOR OF "GOURLAY BROTHERS," "MADGIE'S HERO," ETC.



"LUCY, which of us are you going to give up, Mark Beauclere or me? It must be one of us, dear, and the sooner you decide the better."

The speaker—a tall, lithe, brown-haired, brown-skinned young fellow of three-and-twenty, with an honest face and a pair of earnest blue eyes—placed himself very deliberately in Lucy Armstrong's way, as she was strolling under the trees in the shady old garden, with her hat pulled over her eyes, and a pocket volume of some poet in her hands. It was a scorching July afternoon, and Lucy had quietly slipped away from the half-dozen ladies who were sitting round her Aunt Hester's tea-table, discussing all the latest news of the parish.

Mark Beauclere, an æsthetic young gentleman of thirty, with a very fine voice, rather weak sight, and a large income, was there too, but as he generally was to be found at Miss Hester Armstrong's tea-table, he counted almost as one of the ladies; and Lucy was a little tired of them all, and wanted to be alone. She looked as if she were having some very pleasant thoughts, as she sauntered under the trees, and seemed in no way prepared for the sudden interruption.

"Why, George, you quite startled me," she said, standing still, for George Leslie had placed himself in her way. "Why didn't you go in and have some tea?"

"Because I wanted to talk to you, Lucy. I've been trying to get an opportunity of talking to you for the last week, and I couldn't. I want to know which of us are you going to give up, Mark or me?"

"Seeing that I never possessed either of you, it would be rather premature of me to say," and she glanced up at him from under the shelter of her hat. "Why, George, what's the matter?" she asked, laying her hand lightly upon his arm. "Are you ill—or—angry?"

"No, only heart-sick and sorry and disappointed," and the young fellow looked quite haggard. "I suppose I ought to congratulate you, and then efface myself as speedily as possible; but when a fellow has cared about somebody all his life, as I have cared about you, it's not so easy, Lucy."

"What's not easy, George? I really have not the slightest idea of what you're talking about," Lucy cried, growing very red and confused. "Do tell me exactly what you mean, like a good boy."

George winced, and turned aside with rather a savage expression. To be called "a good boy" by Lucy under certain circumstances would be all very well, but in that tolerant, almost patronising tone, it was too much.

"Am I not to congratulate you on your engagement to Mr. Beauclere?" he said grimly.

"Certainly not," was the very grave reply.

"Then you've refused him, Lucy?" with humiliating eagerness. "I guessed you would."

"Mr. Beauclere has not done me the honour of asking me."

"Oh!" and George's face fell perceptibly. "But you will refuse him, Loo, won't you?" he continued. "He told me he was going to propose this very day," in a savage whisper.

"Then perhaps he will inform you of my reply in due course," and she looked up with a droll twinkle in her bright hazel eyes. "Now, George, if you're not coming in to have some tea, let me pass, please."

"But you don't care about him, Loo, do you?" he whispered, with a very penitent glance.

"Pardon me, I like Mr. Beauclere very much indeed. Why shouldn't I? and I thought, George, you and he were friends."

George turned away with an exclamation that sounded like "Confound him," and Lucy returned to the house, serenely smiling under her broad-brimmed hat.

The drawing-room was empty, but in a little snuggery beyond, which her aunt called her own boudoir, there was a muffled hum of voices, and Lucy smiled more comically than ever as she went up-stairs to change her dress for dinner. Both George Leslie and Mr. Mark Beauclere were to dine at "The Nest," and Lucy, brimful of mischief, resolved to tease George thoroughly before she put him out of his misery.

So she donned a fresh muslin gown, and fastened a crimson rose in her hair, and then went down and took her seat near the drawing-room window, which commanded the entrance to the front garden, and with a very demure smile awaited the course of events.

Presently she was joined by her aunt, looking gravely important, and bristling all over with a secret. Miss Hester was a tall, slender, keen-eyed, thin-lipped lady of as near forty as possible, with smooth dark hair, regular features, and a stately, not to say commanding presence; she had very beautiful white hands, and she used them a good deal in a majestic way. When dinner was announced it was by a wave of them she signified to her niece that she meant to proceed at once to the dining-room. Lucy followed her with suppressed amusement beaming from every feature of her face. She guessed pretty accurately what her aunt's secret was, though, till Miss Hester opened the subject, she would not breathe even a hint of it. As the dinner progressed in impressive silence, she found herself wondering why George did not come. Later on, as she sat at the piano in the twilight, and played over her favourite songs, singing snatches of them, wandering aimlessly from "Auld Lang Syne" to the "Lass of Richmond Hill," and then to "Home, sweet Home," she little thought who was listening to her on the other side of the lilac-tree that shaded the drawing-room window. There, in safe obscurity, George Leslie listened, till he heard the piano closed with just the suspicion of a bang, and saw Lucy's slight white-robed figure cross the room and approach the open window, then he stole away noiselessly with something between a sob and a sigh. There was even a suspicious and humiliating moisture in the poor fellow's eyes as he hurried across the fields in the direction of the railway station.

"She's treated me very badly—but for all that I hope she may be happy. Heaven bless her!" he said, as he caught a glimpse of "The Nest," as the train shrieked past. Then he shrank back into his corner, and gave himself up to the bitterest reflection. He found it difficult to realise that he was rejected; yet Beauclere had told him distinctly that he had proposed to Miss Armstrong that afternoon, and had been accepted. There was no further reason for his staying at Westwater; and he was going to ask his uncle, of the firm of Leslie and Longhampton, to send him on a confidential mission to the extreme end of the earth, where they were supposed to do business. George could not be philosophical enough to look at happiness "through another man's eyes," so he determined to get completely out of the way of Mark Beauclere; and he could not even summon up courage to congratulate Lucy, or say good-bye; but he wrote her a nice little letter, in which a good deal of real feeling was hidden under some stiff formal phrases, and through it all peeped a very sore, bruised, affronted, but still faithful love.

Lucy laughed at it first, and then cried over it, then wiped her eyes, and wrote an explanatory and affectionate reply; but, alas! George was gone on the confidential mission. His letter said that he was on the eve of starting for China, and bore the Southampton post-mark. He said he might be absent for years, or for ever. To poor Lucy, in the first dismay of her discovery that George was really gone, it seemed the same thing.

CHAPTER THE SECOND.

"My dear Leslie, this is a surprise and a pleasure! How are you? When did you get back?" and George Leslie found his hand grasped by a portly, comfortable-looking gentleman in gold-rimmed glasses and wideawake hat.

"I—I beg your pardon, I don't—I can't quite recall you, though I seem to remember your voice," George stammered.

The portly gentleman laughed. "Well, you're more changed than I am, I dare say, and yet I knew you in a moment. Is it possible that you've forgotten ——"

"Beauclere? Why, of course; how stupid of me!" and George's brown face grew a very curious brick-colour as he wrung his old friend's hand. "I've been away five years, Mark, and it tells on all of us."

"I wish it told such a flattering tale on me as it does on you," Mark said with a smile. "Come and dine with me, old fellow—no excuses—it won't put us out in the least. Mrs. Beauclere is at Brighton with Miss Armstrong, so I'm *en garçon*. We live at Putney——Jump in," as a "bus" came up, "and tell me all about your adventures, and when you returned."

"I only landed three days ago, and I haven't had any adventures, except of the most commonplace, practical kind. The business I went out to manage turned out very well. I made some money, and I've

come to England to settle down—that's all. How is Mrs. Beauclere?"

"Quite well, thanks. Have you put on the halter yet, George?"

"No. The Celestial Empire is certainly not the place of all others to tempt a man to matrimony."

drawing or two. His heart beat a little quickly; and on the whole he was glad that he had not to meet her on that first evening. "Does Miss Armstrong always live with you?" he asked presently.

"Yes, of course; where else could she live? Indeed, I don't know in the least how the house would



"'WHY, GEORGE, YOU QUITE STARTLED ME,' SHE SAID" (*p.* 727).

"Lucky fellow! I wish I had gone there with you."

George was silent—it seemed like treason to echo the wish. It was just like that monster Mark ever to express it. Of course, he made poor Lucy miserable, that was only to be expected. How he ever could have become so supremely dull and commonplace George couldn't imagine. When he entered the drawing-room he couldn't help noticing little evidences of Lucy about: her old-fashioned work-table—a black cat, which he seemed dimly to remember—books, and a

get on without her. You see, my wife and I go in for politics and literature, and that sort of thing; and if we hadn't some one to keep us in order and see to our creature comforts, I'm afraid we'd starve. If ever you do marry, George, don't select a clever woman with a taste for logic and metaphysics," Mark whispered, looking round cautiously. "It's simply awful!"

"I never fancied Mrs. Beauclere would develop a taste for those subjects," George replied; and then he smiled a little sadly as he thought of Lucy as a

blue-stocking, and Aunt Hester, who had always been his special horror, whisking about the house, upsetting the domestic comfort of every one, and waving her hands in command or disapproval, unceasingly.

"I never could stand it, I know," he said to himself, as Mark went on giving him some details of the establishment, with a sort of rueful good humour. "A clever wife and an energetic aunt-in-law would be too much for me."

And it had evidently proved too much for poor Mark Beauclere. He was no longer slender, sentimental, and æsthetic; indeed, his chief idea in life seemed to be thorough enjoyment of such pleasures as remained to him. He enjoyed his dinner, for instance, thoroughly, and grew quite confidential over his coffee after.

"It was very sudden, your going away, George," he remarked, after a long chat over the old times at Westwater, and the pleasant evenings they used to have at "The Nest." "Do you know, I thought once that you had rather a fancy for Lucy."

George grew brick-red again, and bent his eyes resolutely on the table.

"It would have been a capital thing for you; and I believe she liked you, for she seemed altogether out of sorts when she got your letter. In fact, George, you might have done much worse than have married Lucy Armstrong."

Still silence and steady contemplation of his glass, on the part of George.

"And for that matter, you might do worse than marry her still."

George looked up with a sudden angry flash, then he grew quite white. Mark was not chaffing in the least, he felt that; still he could not take it all in at once.

"I believe it's entirely on your account she has remained single," Mark continued, with good-natured garrulity, "in spite of all her aunt's efforts to get her well married."

"Did you say Mrs. Beauclere was staying at Brighton?" George presently asked, in a very meek voice; "because I thought of running down there for a few days. Will you come, Mark?"

"No, thank you," with a droll shrug. "My wife and Lucy are staying at the 'Royal;' give them my love, and tell them they need not hurry back, as I'm all right."

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"Lucy dearest, can you forgive me? It was all a dreadful mistake from first to last! I thought it was *you* Mark wanted to marry; and when he told me that evening that he had proposed and been accepted, I was frantic. Aunt Hester never once entered my head."

Lucy's reply was a little unintelligible, but after a time they managed to understand each other. Miss Armstrong could not long resist a lover who had been faithful to her for five years, even when he believed her lost to him for ever; and George resolved to marry her out of hand, so that there should be no more misunderstandings. Sometimes Mark Beauclere chaffs them both a little about George's mistake; but he always boldly asserts that the great mistake was Mark's after all.

H.

GARDENING IN NOVEMBER.



PERHAPS as dreary a month as any in the year is that upon which we have just entered. At all events its very name of November is associated with fogs and with incipient winter. And there have been seasons, too, in which the winter this month comes in with a violent jump, gives us a most tremendous benefit of hard frost and skating, and then leaves us altogether until the following March. An eccentric season such as this we experienced some few years ago, though we can hardly look to have it often repeated. Still we are as busy as ever outside in our old garden, more especially those of us who find they have much heavy alteration to attend to, such as that which we described last month, and which in ordinary cases can well be, and generally is, continued in November. Only let us give that general warning which has been given before: do not attempt moving and transplanting shrubs during a frost, when it is equally unwise also to use the pruning-knife. And even, after or during a wet and moist season, avoid trampling on your lawn and on your beds and borders more than is absolutely necessary, or you will work up your whole garden into a horrible black paste and quagmire, and do infinitely more harm than good, not only on the borders themselves, but by dragging the wet soil all over your gravel walks.

Very rarely, surely, is it that we find a garden

of which it can be said that there is positively *no* room for improvement; that there is no dead tree to come down or that there are no shrubs to be moved with advantage, no blanks to fill up. Blanks indeed! those gardeners are fortunate who, after the winters that we have of late years been accustomed to, can say that none of their evergreens have been transformed into everbrowns or everblacks. What we want, then, for operations of this kind is good open autumn weather, weather in which, by the way, we should work all the harder not knowing how long it may last, but knowing for a certainty that every day is now shorter than its predecessor.

This month, then, among other things we look over our roses. Sometimes we must have remarked that in sheltered situations, and in mild and favourable seasons, roses will go on blooming until quite the end of the year. This of course is exceptional, but the writer of these gardening papers not so many years ago picked in Kent on Christmas Eve one or two fine tea-roses from the open garden. A season in which this can be done is a wonderful lift through the long dreary winter months, as when Christmas is past we soon begin to think of the first snowdrops and crocuses. If, then, by any piece of good fortune and prolonged autumn weather the roses have not as yet cast their leaves, and show a disposition yet to throw out a flower or two more, do not disturb them; but if their foliage be all shed and you are wishing to move your standards to any other part of the garden, this is the month in which to do it.

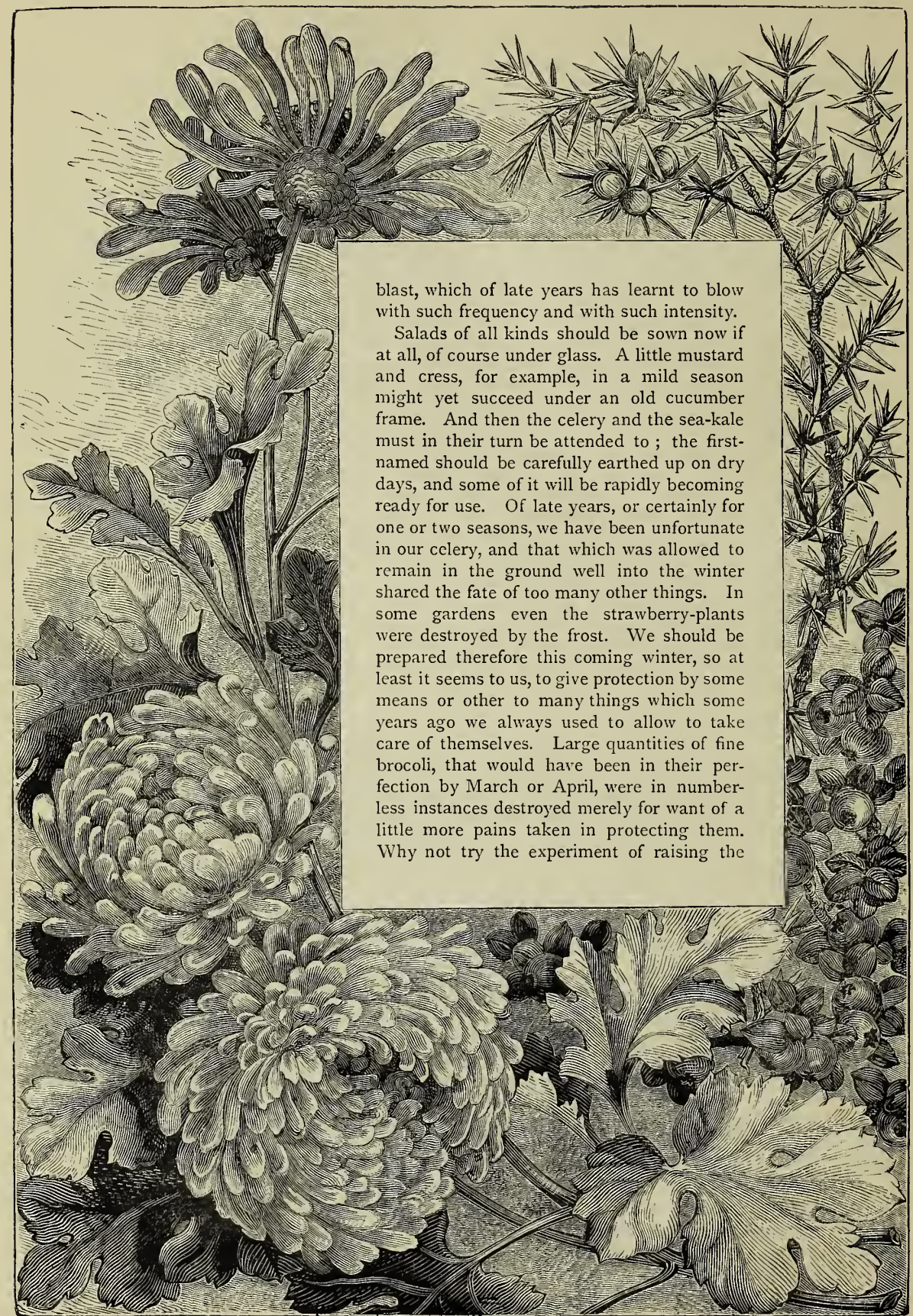
Or it may be you are wishing for some new sorts from the nursery; in making your selection, then, see first what sort of a union there is between the rose and the stock. Those that seem to you only slightly and delicately connected had better be avoided, as a heavy and blustering gale might even yet separate your young rose from its stock. Choose only those, then, that are strong, well grown, and well united. Any of the more tender sort of roses that you may have planted out had better now be taken up and perhaps potted or put away in some shed, laid in by the heels as we should say, to protect them from frost; or you might either protect their head and top generally with some hay-bands if you wish to leave them out in the open. Much of course must depend not only on the hardiness of the rose itself, but upon the nature of their situation. Any great exposure to the north-east blast is decidedly against them.

Nor must you postpone a day longer than you can help the putting in of all your bulbs, if that has not already been done; but on no account choose again for this operation a frosty day, under the delusion that because your bulbs are to be at once protected by the soil above them, it is of no consequence; for recollect your bulbs are perhaps in a box by your side while you are preparing the ground; and your very loosening of the surrounding soil admits the frost all the more readily.

This, again, is the best month for lawn alteration. In October we were busy over our shrubs, and now that we have got them all into good order and made all the alterations there that we wished for, it is well to begin working backwards as it were and step from the shrubbery beds on to the lawn. For re-turfing, get your surface first of all thoroughly level, taking care afterwards that any new turfs that you put down are of a uniform thickness. Begin with the edges of your borders, working on to the centre of your lawn; press each turf as you lay it down close against its neighbour. It is always advisable, too, to have your new turfs used as early as possible after they have been cut, otherwise the new lawn when laid looks yellow; and if your turf when laid was at all dry, give it a watering, and afterwards a few turns with the roller will be advisable. A turf-mallet, however, is of course the proper thing to use in the first instance for getting your turfs into their proper position, This is merely some piece of slate or hard timber about two feet in length and a foot broad. The handle comes from it in a sloping position so that a blow can be given with it uniformly, the whole surface of your mallet striking the grass. Once again to revert to the borders round the lawn, we should have said that besides putting in your new shrubs where they are wanted, the whole of the borders should then have the soil stirred, and all weeds and decayed flowers that serve only to remind us of the sunny glories of the departed summer should be got off. Then if the vacancies look very bare and ugly, fill them up with a few more dwarf shrubs in pots, plunging, that is, the pots into the soil. This will give a bright appearance to the beds, and take off the edge of that look of winter desolation with which in our gardens, for the most part, we are unhappily too familiar. As the spring comes these dwarf shrubs can be readily removed without any damage to them, to make room for something else.

In our kitchen garden, wherever there is a vacant space, begin the winter trenching up, leaving your ground as broken and rough as you can so as to admit of the action of the weather and the frost upon the soil. Indifferent and carelessly done trenching can soon be detected by a practised eye. Some gardeners, anxious perhaps to spare themselves labour, merely turn the ground lightly and quickly over. This of course is done in half the time, and with very little "sweat of the brow," and though from a little distance off the ground may look very neat and orderly, yet nothing can grow properly afterwards on land thus idly prepared. Send the spade and the spud, then, well home each time it is put into the ground.

If you like to try the experiment of getting in a few peas this month, choose an early and a hardy sort. Yet there is certainly a risk of losing them, and a very great one too, if you afterwards fail to give them protection, more especially, as sometimes happens, if we get a mild and muggy fortnight in November, in which the peas make a sudden start, to get as sudden a check by a sharp December frost. In addition, then, afterwards to a little litter on the surface, protect your peas by a ridge of soil so as to keep off the north-east



blast, which of late years has learnt to blow with such frequency and with such intensity.

Salads of all kinds should be sown now if at all, of course under glass. A little mustard and cress, for example, in a mild season might yet succeed under an old cucumber frame. And then the celery and the sea-kale must in their turn be attended to; the first-named should be carefully earthed up on dry days, and some of it will be rapidly becoming ready for use. Of late years, or certainly for one or two seasons, we have been unfortunate in our celery, and that which was allowed to remain in the ground well into the winter shared the fate of too many other things. In some gardens even the strawberry-plants were destroyed by the frost. We should be prepared therefore this coming winter, so at least it seems to us, to give protection by some means or other to many things which some years ago we always used to allow to take care of themselves. Large quantities of fine brocoli, that would have been in their perfection by March or April, were in numberless instances destroyed merely for want of a little more pains taken in protecting them. Why not try the experiment of raising the

soil a little round the stem, and then of tying roughly but lightly some old matting over the plant itself whenever frost bids fair to be severe?

A little more observation of the thermometer, and of the quarter and intensity of the wind, would certainly repay for the trouble merely of using the eyes. The writer noticed a garden some time ago somewhat disfigured, certainly for the time being, by here and there quite an edifice of hurdles such as are used for the protection of sheep and young lambs in February; but then the shrubs and other plants were saved by that means from destruction by the biting—the gnawing shall we say?—of that terrible north-east wind. And the sea-kale to which we just now adverted will also in its turn want some trouble bestowed upon it. That for forcing must of course in the usual way be covered up with sea-kale pots, or your very biggest flower-pots upside down, and then the hot stable manure piled over these. Or if you do not intend forcing, earth up to quite some six or eight inches, and when the buds of the sea-kale show through the top of your pile, your kale is ready for cutting. Manure instead of earth can also be used in this latter instance, for the sea-kale forces its way through the soil nearly as quickly as if it was under the pot. And these sea-kale pots, we say to ourselves, have all to be paid for, and as we wish to practise economy in our garden, we sometimes try to do without them.

In the fruit garden, the wall-trees will want pruning—but not in the frost—and all the young and strong-bearing wood nailed in its place. And yet this perhaps might be delayed for a time if the foliage—and this is sometimes the case in a mild season—has not yet come off. After a light frost we recommended some time ago taking the broom lightly over the trees to bring the leaves off, but never force them off when they show any lingering power of remaining where they are.

If you are fond of amusing yourself with the care of an out-door vine—the grapes on which, however, alas! very often fail to come to perfection—the vine should be pruned this month. These vines are very often neglected for a long time together, and where this has been the case, perhaps the greater part of it ought to be cut away with the hope of starting a fresh growth. Currant and gooseberry bushes, too, may be planted this month. If your kitchen garden has been pretty well kept up, we mean if the soil of it is fairly rich, such land as this will do well for young fruit-trees. Do not let them be more than three years old from the cutting. If they are, they had better be cut back slightly, to give strength to the new wood.

But we have said nothing at all of our greenhouse. Never be too fond of artificial heat, especially in the early winter month such as November is, nor be afraid of too much air, for in mild weather the flowers cannot have enough of it. And if you are keeping plants alive in a room only, do not let them stand by the window at night in a severe frost. In fact, be as variable in your treatment of them as you are of your own wardrobe throughout the year. On the 15th of July this year our thermometer stood at 98° in the shade; yet who would believe that on the 30th of the *very same month* a Hampshire correspondent of the *Times* wrote to say that on the 28th of that month—July—"the frost was so keen as to blight large patches of the bracken fern!" This, then, is the climate in which we gardeners have to work!

A REBUKE.

STRENGTH is shown in sweet persuasions;
Fortitude in silent strife:
Greatness, less on great occasions
Than in acts of common life.

Histories of the sons of glory,
Tales that centuries have not hid,
Tell, in larger type, the story
Of the deeds they daily did.

Not in floods or fires or fighting
Was their greatness, wisdom more;
'Twas but gleams of chance uplighting
All their worth concealed before.

When Xanthippe, mad with anger,
Tried the sage with stormy ways,
He, to shun her wordy clangour,
Sought the sunshine's cheerful rays.

Stung thus by the lesson taught her,
When no answering words he said,
Straight she flung some noisome water
On the sage's sacred head.

Then said Socrates, the wise one,
In his wisdom, greatness, wit,
"This, indeed, should not surprise one;
And the circumstance is fit.

"For 'twere sure no common wonder
Should so threatening, fierce an hour,
Black with cloud and storm and thunder,
Pass away without a shower."

WILFRED B. WOOLLAM.

THE FIFTH OF NOVEMBER AT OXFORD.

TOWN and Gown rows, once looked upon as time-honoured institutions which might in nowise be neglected, are at Oxford fast becoming things of the past—mere traditions preserved in the pages of a few chroniclers, and recounted year by year as the famous day comes round.

Town has apparently discovered that it possesses a surer and more satisfactory method of revenging itself upon Gown through the medium of business transactions; while it would seem that Gown has at length come to the conclusion that to receive a black eye at the hand of a sturdy labourer, or a broken nose from a missile cast by an errand-boy, is not, after all, the most romantic method of covering oneself with glory. Light has also broken in upon the authorities. They nowadays recognise that, for the gentlemen placed under their care with a view to being trained in the flowery paths of learning, and who are therefore supposed to spend their evenings in "turning the page of wisdom o'er"—for these to engage in pugilistic encounters with roughs of the lowest order is not a state of things that should exist.

In fine, common sense appears to be gaining a victory, and one more custom more honoured in the breach than the observance is passing away.

But it is not dead yet. Timorous gownsmen have still some cause to avoid being out alone on the evening of the fateful Fifth. Bands of roughs, composed for the most part of youths of immature years, gather here and there in secluded spots, and occasionally venture to set upon any solitary undergraduate who may pass that way. The result of this is not always harmless. It is not so very long ago since a commoner of St. John's received serious injuries from being struck on the temple by a stone in one of these encounters.

By a portion of the undergraduate element the decay of "the good old custom" is lamented with touching earnestness. Year by year, when the month comes round, the Fifth, with its old method of celebration, becomes the topic of conversation over dinner in hall. The stories of doughty deeds are told again, and the prowess of college heroes are lauded to the skies as of old. Fired by these accounts, the freshmen join in lamenting the present strait-laced times, and long for an opportunity of distinguishing themselves in some hard-fought contest. In imagination they see themselves one of a noble band encountering hostile forces of vastly superior numbers. They mentally pass through a struggle of doubtful issue, perform prodigies of valour, and at length return with honourable wounds to recount their exploits to the less daring.

But inasmuch as general engagements of the old order are now extinct, the adventurous gownsman anxious to give evidence of the spirit within him must seek other means of doing so.

Accordingly, he undertakes to sally forth alone, to parade the town, thread certain by-streets, and comport himself like a valiant Oxonian in any emergency that may arise.

There is a story told of a somewhat boastful freshman who attempted to earn distinction in this manner. His scout had for an assistant a boy, to whom this freshman had made himself peculiarly obnoxious, probably by objecting to having his beer consumed on the stairs and his marmalade pots explored by unclean fingers. Upon the evening of the Fifth the boy overheard the object of his hatred announcing to a select audience his intention of setting out at a certain hour in search of adventures. Upon this, he left the college at the first opportunity, and speedily collected together a considerable band of juveniles. With these, all duly armed, he prepared in the path of the offending one a cunning ambuscade, and then bided his time. True to the declaration, the unsuspecting freshman came upon the scene, and found himself in the midst of foes. Ruthlessly assailed on all sides, he did not stay to face them, but at once turned and fled, vigorously pursued by the enemy. Only a short distance had to be traversed, and he was soon safe within the shelter of the college walls. Thereupon he repaired to the rooms of a friend, and detailed to an excited audience the manner in which he had been assailed by a horde of roughs, had for a time valiantly resisted them, and finally effected an orderly retreat, pursued by the relentless enemy.

But although the old animosity between Town and Gown is fast dying out, a certain section of the undergraduates refuse to allow the Fifth of November to pass without some sign of recognition. Any satisfactory reason for their conduct is not readily found. Perhaps it is most charitable to suppose that on that day a temporary fit of insanity in a mild form comes over the rioters.

At this moment the proceedings of a Fifth of November not so very long past come vividly before my mind.

A body of adventurous malcontents had resolved that the day, or rather the night, should be marked by some stirring deed. They laid their heads together, and concerted a plan of action. In accordance with this, each conspirator bound himself to bring to the centre of the quad at a given hour whatever inflammable materials he could lay hands on.

Eleven o'clock struck, and all was quiet, save for such noises as may be always heard in college during the early hours of the night.

But presently, from the staircases on all sides, silent figures emerged. Each bore an armful of some material, and all sought the centre of the quad. In a short time a considerable crowd had gathered. Conversation was carried on in low tones, and measures were being concerted for bringing from the

Don's garden a statue for cremation, when the porter appeared on the scene.

"The Dean requests that all gentlemen will retire to their rooms."

Upon this a brief consultation ensued, and then the conspirators, carrying with them their burdens, retired in a peacefully obedient way that might have aroused suspicion.

"The mighty Tom" had tolled the midnight hour. The porter had gone his rounds, and put out the gas-lights, and all was quiet, save for an occasional laugh or shout from some room where revelry was still going on.

But before the first quarter sounded from St. Mary's solitary figures began as before to issue stealthily from each doorway, and to draw silently together in the centre of the quad. One after another came forth and joined the fast-increasing group, all carrying burdens of some description. The faint rays of the moon struggling through clouds soon disclosed the conspirators in the act of raising a kind of pyre. Small packing-cases, hampers, fagots, and other materials were being piled together in a most careful manner. Around the base the edges of newspapers and ends of straw peeped out.

Presently four of the stoutest workers departed to procure the before-mentioned statue of some college dignitary renowned in years gone by. Time, the weather, and other agencies had operated so effectually upon this, that facetious young gentlemen were in the habit of pointing it out to strangers as a curious example of ancient Greek art brought from the neighbourhood of Corinth.

With this upon their shoulders, the messengers were soon descried returning through the darkness. Aloft upon the pile they place the unoffending statue, which, with its uplifted right hand, appeared as though reproving them for their conduct. Then a demand was made for a cap and gown, and in search of these a conspirator was despatched. He darted into one of the doorways, entered a room (N.B.—It was not his own) and soon returned with the required articles. These were duly arranged upon the figure, and all was then ready.

The ringleader was kneeling, and in the act of igniting the pile, when a cry was raised.

"The Dean!" shouted one, at the same time taking to his heels with remarkable celerity.

"The Dean!" cried others, emulating his example.

Yes; there was the Dean, accompanied by the porter, advancing with rapid strides towards the scene of action.

The flight became universal. But the Dean was neither swift in pursuit nor keen of vision. He only saw retreating figures, coat-tails vanishing around corners, and lights being put out; heard the slamming of "oaks," and found himself and the porter masters of the field.

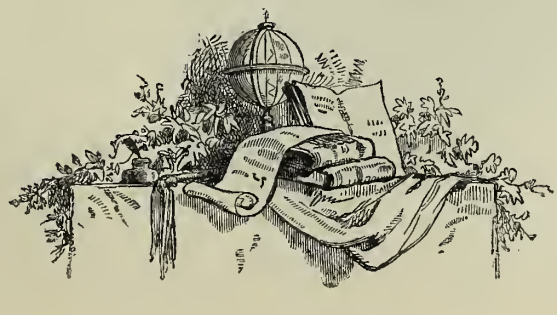
One capture alone he made. An unlucky individual, guiltless of participation in the affair, came down from his rooms to see what was going on. Upon him the irate Dean pounced, delivered an extempore lecture upon the folly of such actions, and finally, notwithstanding his protestations of innocence, "gated" him for a week on the nominal charge of being out of his rooms after midnight. Somewhat mollified by this capture, the Dean retired, leaving the porter to remove the pile and superincumbent effigy.

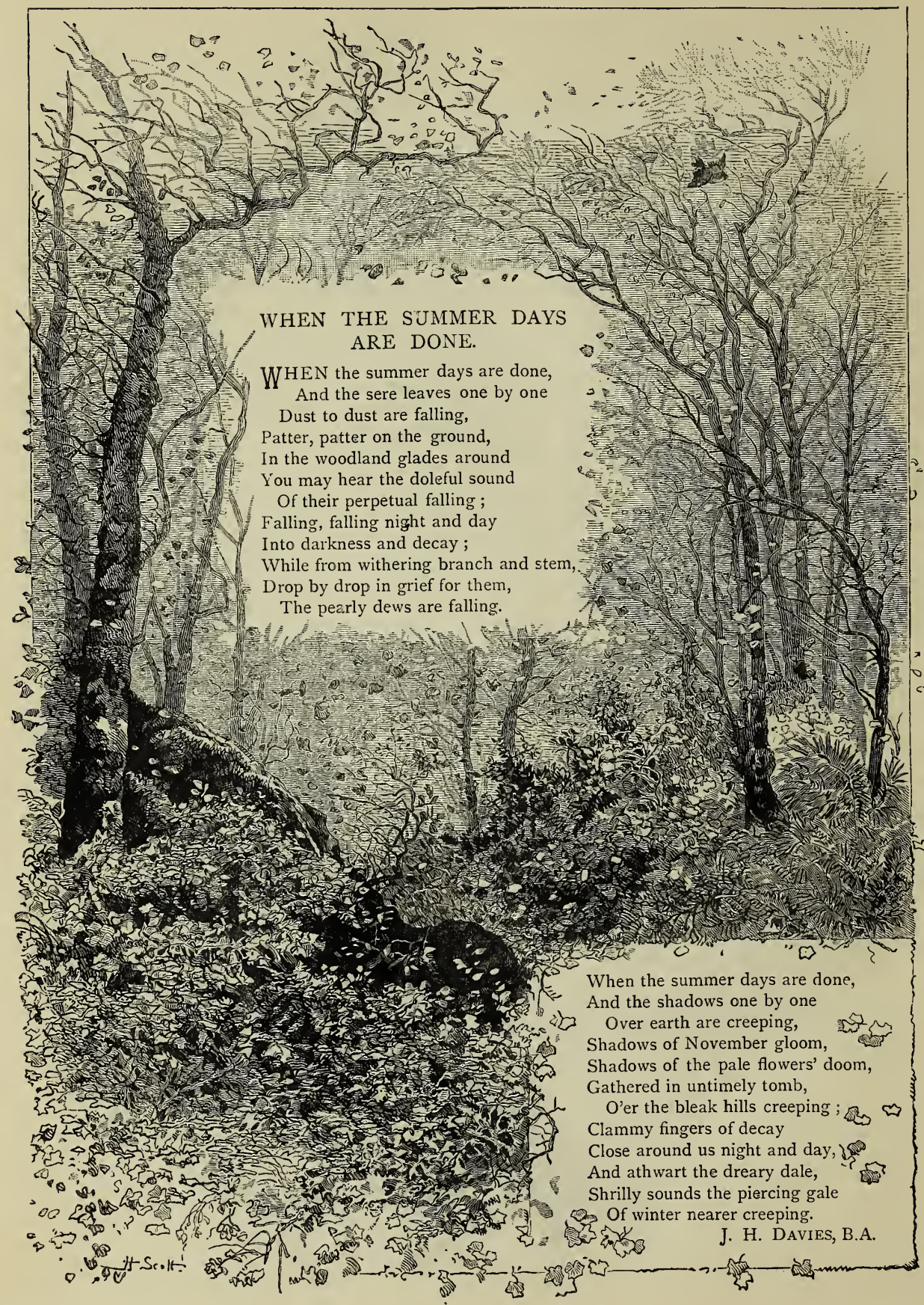
When this had been done, some of the evil-doers again came forth, for in flight they had rushed into the nearest rooms, without regard to ownership. The spirit of mischief was not yet dead within them, and they worked off what yet remained of the rabies in various ways. One party dragged a garden-roller to the top of a staircase on which many reading-men had rooms, and set it rolling down; others repaired to the rooms of a man who had refused to join in their deeds, and screwed up his "oak," or outer door. By these means he was effectually confined to his room until his scout could borrow a screw-driver the next morning and set him at liberty.

At length even amusements of this nature palled, and tired out by their exertions, the heroic perpetrators of these daring deeds retired to the privacy of their own apartments, and there found the repose so much needed for their weary frames.

It must be confessed that conduct such as this is very foolish, and is what might be expected from school-boys rather than from members of the University. But it is a mistake to regard those who still retain a taste for such exploits as anything more than school-boys. Of a surety the credit of our Universities would not suffer were this taste for childish pursuits to become a thing of the past. Certain events of recent date do not make us sanguine as to an early change of feeling; but still, on comparing present with past, a gradual reformation may be discerned. Perhaps the next generation may come to look upon the screwing up of an obnoxious "Don" as a relic of barbarism happily extinct, and upon all ungentlemanly actions in general as naturally unbecoming members of a great University.

A. R. BUCKLAND, B.A.





WHEN THE SUMMER DAYS ARE DONE.

WHEN the summer days are done,
And the sere leaves one by one
Dust to dust are falling,
Patter, patter on the ground,
In the woodland glades around
You may hear the doleful sound
Of their perpetual falling;
Falling, falling night and day
Into darkness and decay;
While from withering branch and stem,
Drop by drop in grief for them,
The pearly dews are falling.

When the summer days are done,
And the shadows one by one
Over earth are creeping,
Shadows of November gloom,
Shadows of the pale flowers' doom,
Gathered in untimely tomb,
O'er the bleak hills creeping;
Clammy fingers of decay
Close around us night and day,
And athwart the dreary dale,
Shrilly sounds the piercing gale
Of winter nearer creeping.

J. H. DAVIES, B.A.

MAJOR GODFROY'S DISCOVERY.

By FRANK BARRETT, Author of "Hidden Gold," &c. &c.

CHAPTER THE NINETEENTH.

THE DISCOVERY.



IT was close upon midnight by the time the little party arrived at Andely. Mère Duval took her place in the boat whilst her young mistress lingered on the shore, bidding good-bye to Basil Garton. The old woman coughed and splashed her oars in the water without being heeded by them.

"Now all is ready, mam'selle," she said at last.

"One moment, Mère Duval," said Doris; and then turning to Basil, "You will row across quite early to-morrow morning?"

"Yes; I wish to see Major Godfroy without delay."

"But he will open the door to no one; he will see nobody. I must tell him that you want to see him when I take his breakfast."

"Mam'selle, the clock is striking twelve," said Mère Duval sharply.

"I am coming;" and again she turned: "I rise quite early in the morning; do you?"

"Mam'selle forgets that I am subject to rheumatism, and that she should not keep me sitting in the boat alone when she ought to be in bed," grumbled the old woman.

Doris put her foot on the boat, and yet lingered—how could she help it? Did not this dear new friend hold her hand? Mère Duval gave a vicious jerk with the oars, that obliged Doris to snatch her hand away in preserving her balance. And that terminated the long leave-taking; but Doris kept her eyes on the figure standing by the quai until the boat entered the shadow of the alders, and he, with a final wave of his hand, turned away and walked to the hotel.

"'Dear little goose!' he called me, and he held my hand so," soliloquised Doris as she sat alone in her room. Then she drew off the glove from her right hand, and slipped it under her pillow, with some silly superstitious notion that perhaps it would recall the happy events of the evening in her dreams.

Early in the morning Basil hired a boat, and crossed to the island. He found Doris in trouble. Papa had not taken his coffee, and had called from the enclosure that he could not hear her, and must not be disturbed, and that she was to leave him. She was frightened by his harshness and the strange sounds that had mingled with his voice. These sounds Basil, approaching the workshop, heard also. A low, intermittent grumbling and the clicking of a ratchet-wheel first struck upon his ear, then a whirling noise like the sudden flight of a partridge-covey, followed by a loud roar like that of a frightened beast.

Such a combination of sounds he had never heard before, and he pitied the poor girl who for the last three hours had been listening with increasing terror to them.

She clung to his arm, not with the happy tenderness of last night, but from absolute fear.

He led her away, and tried to engage her attention upon other things while he settled what course to take. He feared the consequences of intruding upon the major in the presence of Doris. The major might be violent—probably, indeed. The best way would be to get her off the island, and then force an interview at all hazards, for there was no knowing what danger the major might not be in from the very machinery he had constructed. Whilst he was coming to this conclusion, they were walking on the further end of the island, Doris trying to overcome her anxiety and appear interested in the various features of the island she was showing; but even here they did not escape the terrible sounds.

"What can it be?" asked Doris, in a low voice, trembling, as a louder whirl and roar reached her ears.

At that moment Mère Duval, clasping her hands, and then raising them in the air, ran towards them. She was quite white.

"I cannot stay in the dairy!" she exclaimed; "it is no longer safe. I have seen something which makes me think my poor master has conjured up the evil one! It sprang up as high as the pear-tree in the enclosure—a monster without shape!"

"Don't talk nonsense, Mère Duval," said Basil sternly, with a frown and a significant movement of his eyes towards Doris, whose face was as white as snow. "You ought to know better than to say such things at your time of life. Follow me."

He took Doris's hand, and led her down to the boat, Mère Duval following in silence, but with many a backward look. Maintaining the tone of command, he bade the two women get into the boat, which he then pulled across the river to the shore opposite Petit Andely, knowing that their fears would be increased by the curiosity and monstrous suggestions of the idle folks there. Doris did not speak; she obeyed in silence, looking up to Basil Garton with undoubting

confidence in his wisdom and strength, when he bade her rise and leave the boat.

"Now," he said, when they stood upon the shore, "you will walk round to Andely by the bridge; by that time Mère Duval will have come to her right senses, and I shall have found out what has alarmed her so terribly."

He re-entered the boat quickly, and returned to the island with rapid strokes, feeling that not a moment was to be lost.

He slipped the head-chain over a stone, ran up the steps, and arrived breathless at the door of the workshop.

"Major Godfroy!" he cried, at the top of his voice, kicking the door.

A loud roar was the only response. He threw himself against the door with all his force: the door showed no signs of giving. Again the tearing, whirling sound arose: this time clearly from the enclosure beyond the workshop. He ran round to the great wall, and clutching the vine that covered it, scrambled upwards, and got his fingers on the top of the stones. By a vigorous effort he drew himself up until one foot found a resting-place in a hole, then he raised himself, and threw his arms out upon the top of the wall, fixing his fingers like hooks in the vegetation and crumbling fragments, and so drawing his body upwards that at length he got his chest upon the edge, and could see into the enclosure.

Scarcely had he obtained this position when the whirling sound re-commenced, and a marvellous sight came before his eyes.

A thing was moving through space—a thing which at that moment appeared to him as it had to Mère Duval—without shape: a cylindrical mass, as he afterwards recalled it to his mind, some four or five feet long, rapidly flying towards him with a zig-zag movement, which he described by this diagram—



It had four short wings the length of its body, which revolved round it in opposite directions as it made the upward movement, but which presented stationary planes in their oblique descent. For the wings to have revolved round a common centre in opposite directions they must have been composed each of several pinions fixed in separate axles, as, indeed, was shown in the fragmentary diagrams discovered later in the major's workshop. But the fact did not then appear to Basil. To him the wings in their movement presented only a fluttering envelopment of the body from which proceeded the whirling sound that had been so inexplicable. When he first saw the machine it was passing round the end of the enclosure farthest from him; before he realised what it was his eye saw, it flew upwards not six yards from him, then swooped down obliquely, passing his face so closely that he could feel the powerful displacement of the atmosphere in its vicinity.

The next moment a cry like the shriek of a drowning man pierced his ears, and looking to the opposite side of the enclosure, from whence the cry arose, he beheld an old man in the blue costume of an ouvrier, with a white moustache and thin white hair descending to his shoulders, clasping his hands, and looking up at him with terror. The machine had come to the ground near his feet, but he took no notice of it. He continued to look at Basil, with despairing horror on his face. Suddenly he unclasped his hands, and extending them with clenched fingers towards Basil, he shrieked—

"I have given you warning, all of you—robbers and heartless thieves! You come to rob me! You have succeeded in finding my secret. In the moment of my success you think to steal the reward for which I have so patiently toiled; you are mistaken. You shall not live to use your knowledge!"

As he shrieked these words he ran to the closed door communicating with his workshop, and catching at a handle, pulled the wire to which it was attached. Basil heard a bolt move, a door creak; then he dropped to the ground, satisfied with what he had seen, and conscious that this was not the moment to state the business he had come there to communicate.

CHAPTER THE TWENTIETH.

THE BEAR.

BASIL GARTON paused at the foot of the wall to recover from the bewilderment into which these events had thrown him. That the old white-haired man was Major Godfroy he had no doubt; to a certain degree he understood the nature of his agitation; but he was at a loss to comprehend the meaning of his threat, or how it was to be effected by pulling a wire. The major made no other attempt against him, and he was unarmed; Basil concluded that it was merely a furious and idle menace to make him withdraw from his point of observation. One thing was certain: whilst the old major was in this excited state he must be left alone, and Doris, for her own sake, must know nothing of his terrible agitation.

He had left the boat among the alders on the west side of the island, and he turned his steps in that direction, when it occurred to him that Doris might by this time have walked round to Petit Andely, and be approaching the island on the east side.

"The girl's anxiety for her father—and perhaps for me—may overcome other considerations," he said to himself, coming to a stand by the low fence that was intended to keep the cow in the orchard and from straying into the garden. "At any rate, it will be well to walk to the steps and see before going the other way to the boat."

A quick shuffling noise in the long grass roused him from his reflective mood. He had turned an angle of the great wall, and the sound came from the place he had left. Was the threat not idle? was the old man in pursuit? It did not sound like a man's step at all; it was like the slouching gait of a four-footed creature coming at a "dog-trot." It was not unlikely the major had a dog. He put his hands on the fence, and kept his eye on the corner. If the major came, he should stand; but if it were a dog, his safety lay in vaulting

the fence and bolting. These thoughts occupied half a second, then the Savoyard's ragged, rusty-coated bear turned the corner, and put a stop to speculation.

Surprise for a moment robbed him of power to think or act; happily, the bear seemed to be equally astonished: he stopped dead short, fixing his little black eyes on Basil, possibly to make sure that it was not his old master with the muzzle and oak staff; he stood motionless while one might count ten; then he raised himself up on his hind paws.

With a quick spring, Basil threw himself over the fence and ran. Not more than a score of yards lay between him and the west side, where his boat lay; but he made for the east, which was four times further removed, for now more than ever the danger of Doris landing upon the island must be averted.

Crash! Basil did not wait to look behind him for the explanation of that sound; he knew that the fence was down, and the bear after him. A muffled growl had preceded it, the long plantigrade step, tearing through beet and cabbage, followed it. Basil kept his elbows down, and ran his best; the bear seemed to run more slowly; but yet how surely the sound drew nearer to his ear with each yard Basil knew too well. Half-way to the steps he recognised the impossibility of reaching them: he fancied, moreover, he heard Doris's voice in that direction; he gave a sudden turn to the left. The water was nearer there, and he knew that if he could throw himself over the bank and into the water he should be safe. The bear at once altered his course, and profiting by the angle, drew nearer to his prey.

The saliva dropped from the lips of the starved and latterly neglected beast. Basil heard the stertorous breathing distinctly: he fancied he could feel it. The brambles upon the edge of the island were only four yards off now. Clenching his teeth, he made a desperate spurt, and as the bear's muzzle came within a foot of his leg he leaped over the ragged growth, and catching his foot in a tangled spray, fell headlong into the water, and struck the muddy bottom of the Seine; and that seemed to him the happiest moment of his life. He was expert in the water, and came rapidly to the surface, some feet below the part where he had plunged. The current was swift, and hurried him along half a dozen yards, and then he grasped a willow that had broken from the bank, but yet held by its roots to the land, and spread its branches out upon the water.

Higher up the river he saw a boat approaching the island; a young girl was pulling the oars, an old woman sat near her with her face in her hands.

The girl was Doris, and she was making for the landing-steps on the island.

With all the strength of his lungs he called, "Help! help!"

It was not of himself, but of the girl he thought, and then he turned his eye eagerly to the bank, looking for the bear, and still crying for help. The bear had paused on the bank when Basil threw himself over, seen him re-appear upon the surface, and then slowly marched along the bank, keeping his eye upon the floating man, and thinking perhaps that he must presently land again; now he stood upon the bank, sniffing the air and looking down on Basil, who was but a few feet from the shore. A minute of inactivity, and then the bear thrust his head through the briars, and putting his feet upon the clayey bank, scrambled down to the foot of the willow. Basil shifted his position, getting further from the shore, but still holding to the willow, as the bear set his foot on the trunk, and carefully essayed to approach him. The rotten bank gave way under his weight, and he found his head under water the next moment. Plunging and floundering, he regained the bank, growling savagely. Basil turned his eyes from the ludicrous aspect of the disappointed beast squatting by the root of the willow, and grumbling at his mishap, to the danger which menaced Doris.

"Thank Heaven!" he murmured, as he saw the boat coming down with the current. His cries had been heard, and Doris's quick eye had detected him waving his hand from the water by the fallen willow. With a few quick strokes she approached within a few yards of him.

"Keep well out, Doris—out in the middle!" cried Basil, and quitting the tree, he struck out from the shore. It was not until he was in the boat, which was dropping down the river slowly and pointed to the shore, that she understood the reason for this command, and saw the danger he had escaped and saved her from. The bear was on the bank, stopping now and then to peep through the bushes anxiously at his oncoming prey, and then breaking into a short trot to recover the ground and keep pace with the boat.

"Oh, papa!" cried Doris, dropping the oars in an agony of fear. Basil caught hold of them, and pulling the boat still further from the shore, said—

"I have seen him; he is quite safe. He knows all about the bear. Do not be alarmed. We will go over to Andely and get assistance at once. Let me take your place. I will row."

And now the bear, seeing his hopes foiled, as the boat drew away further and further into the river, raised himself on his hind legs and gave a loud deep roar.

CHAPTER THE TWENTY-FIRST.

BLAKE STANDISH IS PAID IN ADVANCE.

THE simultaneous arrival in Andely of Blake Standish and Basil Garton had not been a merely accidental coincidence. Although the two men were so opposed to each other in every characteristic, they were yet included in one of those circles of acquaintance which unite people unknown to each other, and daily surprise us with their results. The link between them was the Irish gentleman calling himself a journalist, who had before rendered services to Blake Standish, and who, happening to be in the office of the illustrated paper for which Basil Garton drew when that young man was explaining to the editor the circumstances which precluded him from accepting work for a week, conceived that the news thus obtained would again be of service to his aristocratic friend Standish. Blake Standish heard these particulars, and on the "off chance," as he called it, of being able to extort money

from the major, set out for Normandy. Chance had brought him side by side with Basil on the diligence; but the intimacy he tried to make had not extended beyond the briefest replies to his remarks—Basil having decidedly strong "likes and dislikes," and men of such a sort as Blake Standish evidently entering among the latter. The acquaintance of Blake Standish with M. Montier had arisen from Standish's inquiries in the café relative to the gentleman living on Ile Content, and had ripened as the watchmaker hinted at the enormous fortune to be made by inventions, and the probability of Major Godfroy producing something which would be a fortune to any one with the ability which he (M. Montier) had of applying it to practical purposes.

"If one could only get inside his workshop, and see what he is doing——" M. Montier said, completing the sentence with a gesture of the most eloquent kind.

"Why don't you go and see?" asked Standish.

"Because he locks himself in a windowless workshop, and has forbidden me to go upon the island. He kept a bull-dog to guard the island once, but—somebody killed him with a stone."

At that moment their conversation was interrupted by the warning given them by the major, which has been related.

"His threats will have no effect upon me," Standish said soon after. "I have a right to go there, and I will go."

"Then we may make our fortunes yet," said M. Montier.

The two dined together, and afterwards sat in deep conversation until the café of the Chaîne d'Or closed; then they separated, promising to meet next morning at Chantière, a village on the Seine, about two miles below Andely, where M. Montier kept a fishing-boat.

They met as agreed, and M. Montier pulling across to the east side of the river, turned the head of the boat up-stream, and towards the northern extremity of Ile Content.

"It is market morning, and Mère Duval usually goes about this time with mam'selle to Grand Andely, so in all likelihood there will be no one on the island but monsieur. We are more likely to see what we want if we ourselves are unseen than if he is on the alert," said M. Montier.

"Yes, yes; that's settled. I'll go and look about first, and if there's no one about I'll come back and tell you. You know the show, I'll wager, and can find out a place to see what's going on."

"There *is* a wall," M. Montier observed. There was silence for awhile, and then Blake Standish asked—

"How's the law in France touching manslaughter? If the old gentleman should be violent, for instance, and I happened to kill him in self-defence, what would happen?"

"The law is tolerably lenient. You have nothing to fear if you can prove you had a right to go on the island."

"I can prove that by the best of reasons. I can prove that the girl that lives there is my daughter. I have a father's feelings to gratify, haven't I?"

"Poor man! Of course. Ah! you will make the whole court weep if you dwell upon your long separation and your eagerness to recover your lost child. A French jury would justify a father killing a man like monsieur, with no other provocation."

"Would it?" said Blake Standish thoughtfully, turning over a weapon that lay at the bottom of his jacket pocket.

"Saperlepipopette! What's that?" exclaimed M. Montier, holding his oars and listening.

"What's what?" Standish asked, starting nervously from his reverie.

"Didn't you hear something like the roar of a lion?"

"Probably a cow," remarked Standish coldly, dropping again into reverie, and feeling the smooth trigger of his revolver. M. Montier dipped his oars again, and did not interrupt his companion's moody meditation until they reached the island.

"You will land here, and walk straight up the meadow and across the orchard to the house that you will find before you, and if all is quite quiet, and no one at home but the old man, you——"

"All right. You can come if you hear a noise," answered Standish, stepping from the boat.

"I should not be surprised if monsieur comes to die this morning. So much the worse for him, so much the better for us," said M. Montier to himself as he watched Blake Standish walking towards the orchard, with his hand still in the pocket of his jacket.

A dip in the island presently caused him to disappear from the sight of M. Montier, who then turned his eyes to the bottom of the boat, revolving possibilities in his mind. Nothing but the trippling of the water through the sedge broke the silence for some moments.

"There it is again!" he said, suddenly raising his head. "A roar like a wild beast—ah!"

The roar was followed by a loud cry, something between an imprecation and a scream of terror. Then a pistol-shot, another, and another. Again that roar, louder and more terrific, drowning the frightful human scream for help.

"It is the young monsieur who cries for help," thought M. Montier in surprise. "And he has fired only three charges of his pistol, yet still cries!" He considered his position for a minute, then slipped the mooring-chain and dropped down with the current.

"My friend, Jacques Montier, you are not wanted there," he said to himself as he heard the cries grow feebler and feebler.

The awful sounds reached to Andely, and people coming from their houses ran down to the edge of the quai, where they collected in groups, talking and questioning vehemently, while still the cries came to their ears. Most were intently watching the movement of a boat which was passing rapidly to the island, pulled by M. Lucas and M. Sté. Marie, with the Commissaire of Police and Basil Garton holding rifles in their hands; but others formed a group about kindly Madame Ste. Marie, who was holding poor Doris in her strong arms, and trying to assuage the poor girl's agony.

"It is papa—dear papa who cries! hear him! Oh,

papa, papa! And now his screams are fainter; he is dying—cruelly suffering and dying! Oh, let me go to him—papa, papa!" she sobbed.

"He may escape. We heard him shoot the beast, and see, his friends go to help him. Ste. Marie and Lucas—look, how they run—and your friend. They are on the shore now. They may yet be in time."

"Oh, my friend, my friend!—he will not escape now; and who then will be left to me?"

"Chut! Would I have let Ste. Marie go if there had been danger? No; when men have guns there is nothing to fear from beasts."

Flack—flick—flack! came the report of three rifles, stilling the tongues of all with expectation. Doris trembled like an aspen-leaf, and fixed her eyes upon the shore.

And now upon the slope where the cow was daily taken down to drink a man suddenly ran, a rifle in his hand. It was Basil Garton. He called out to them.

"Ecoutez!" whispered Madame Ste. Marie.

Then all listened breathlessly as the wonderful news was called across that Doris's father was untouched and unharmed.



"BASIL GARTON PAUSED AT THE FOOT OF THE WALL" (*p.* 738).

CHAPTER THE TWENTY-SECOND.
"FINISHED."

THE bear lay dead upon his mangled victim. Basil, approaching the ghastly spectacle, was the first to recognise the lifeless face of Blake Standish; and as he ran away to give relief to Doris, the other men did what was necessary to separate the remains of man and beast, astonished to find that the victim was not he whom they expected.

But where was the major all this time? It was impossible that the sounds could have escaped him, or that he could listen unmoved to the killing of a man by the beast he had loosed. Yet no sign of him was visible. As they looked round in silence for some trace, there came to their ears the noise of loud and quick hammering from the workshop. Covering the face of the dead man with a handkerchief, Ste. Marie walked in silence to the workshop, followed by the commissaire. Basil was standing by the door, which was closed. The battering continued, while the men stood listening, in ignorance how to act. For half an hour it continued without intermission, then it stopped.

"Finished!" cried a voice despairingly within; a hammer fell, and all was still.

"Come; we have remained inactive long enough. We must enter there," said Basil, knocking loudly at the door. There was no response. He signed to Ste. Marie and the commissaire, and all three put their shoulders to the door at once. The bolt gave and the door flew open. With fear they entered, expecting another tragedy. It seemed to Basil not unlikely that the old man in his despair had put an end to his existence. They all stood in speechless wonder on the threshold. On the black hearth of the forge sat the old man, his elbows upon his knees, his chin in his hand, looking down with fixed lustreless eyes upon the countless fragments at his feet—the heap of shattered wheels and pinions that alone remained to tell of his long, long days of toil, his sleepless nights, his constant anxiety of years, his patient struggle, his hard-won victory—a great mound of heterogeneous particles, as useless, as purposeless to the eye as the dust and débris of a fallen palace.

He did not move as the door flew open and the strangers entered. He seemed unconscious of everything but the ruin under his eyes. And what mattered it now who came, or who saw?

"Finished!" he murmured again. And this word summed up everything for him.

* * * * * *

They watched him in silent awe for a minute. His perfect calm and absence of emotion were more terrible to witness than a paroxysm of rage or despair would have been. It was out of the course of nature that the mind should be at rest, while yet the sweat stood upon his grimed face, to prove the terrific excitement he had gone through. Suddenly his elbow slipped from his knee, and without attempting to recover himself, he fell. Ste. Marie ran forward and caught him in his arms, and the other men came to assist.

"Dead!" whispered Ste. Marie.

The supposition, which appeared to be but too well founded as the flaccid body was being carried from the workshop to a chamber in the house, was not, however, absolutely true. Mind and body, exhausted by the tremendous strain of the last few days, had yielded under the final shock; but the major's healthy constitution survived even the breaking of his heart. Rest, nourishment, and medical skill in a few days revived his physical vitality; but his mental faculties, like the mechanism he had created, were shattered and powerless, and human skill could not restore to them their higher functions. When Doris again took his arm, it was not, as of old, for her own support and protection, but for his; he was now the child. They hoped that rest would enable his mind to gain strength; but weeks and weeks passed and there was no change for the better.

He was utterly dependent on Doris, for though he recognised things and people, and understood simple conversation, he had no memory, and was incapable of anything that required reasoning. For instance, he could go to the flower market to buy a bouquet for Doris, alone—poor old man! that was the greatest delight of his life—and if he was called upon to pay three francs, he would give a five-franc piece and receive the change, but without the slightest knowledge of how much there ought to be. For him it was a happy state of forgetfulness—a calm oblivion of the past and carelessness of the future. "He does not know what he has lost, poor dear!" said Doris; but she was moved with womanly compassion for him in having lost the majesty of manhood.

Basil took him to the most eminent physician in Paris for advice. "Medicine can do nothing," said the doctor; "Nature alone can restore what she has taken away. It will be well to try change of scene." In reply to a question, he said, "No, I do not recommend the South; it is enervating. A brisk, bracing air would be better—that of his own country. For an Englishman the best of climates perhaps is the English." He could give no encouraging assurances. "There is always hope," was all he would say.

Leaving the major with Doris and Mère Duval, Basil returned to Andely, and with the aid of Virton Ste. Marie, who had taken charge of the house on the island, he made a careful examination of the major's property, sold what he considered was of no value, and preserved whatever seemed to him of personal interest. In a heavily-bound box beneath the bench in the workshop were two or three diagrams on brown paper; these he enclosed in an envelope, and sealed. From the débris that remained of Major Godfroy's discovery nothing could be learnt. Ste. Marie shovelled the mass of wood and iron particles into a barrow, and shot it into the Seine, and afterwards with a pail of whitewash effaced from the walls the traces of plan and diagram made by the inventor. More than once the tender-hearted fellow paused to shed a tear as he came upon signs of the hand which had lost its cunning, the brain which was wrecked.

When the major's affairs were wound up Basil left Andely, promising to write to Ste. Marie, and returned to Paris, whence the little party proceeded immediately to England. Once on the passage, to try the major's faculties, Basil broke the sealed packet and showed him his own diagrams. The major turned it to the right and left without comprehending anything, then he asked—

"What is it, if you please?"

"It is the diagram of a machine made by you."

"I know nothing of it, sir. It must have been very long ago," said the major, folding up the paper, and returning it with his old formal politeness.

Basil was perplexed. It was impossible to make him understand the business he wished to communicate, and nothing could be gained by telling Doris, who already had sufficient care upon her young mind. What should he do? The only answer he could find was—Wait and hope.

CHAPTER THE TWENTY-THIRD.

THE END.

IN a bright little town upon the Devonshire coast Basil found a small house, facing the sea, which answered all requirements, and here he installed Doris, with the major and their faithful old servant, Mère Duval.

He had made all preparations for departure early the following morning, and was walking on the beach with Doris; the major, with a child whose acquaintance he had made, was looking for anemones among the boulders.

"You will keep me well acquainted with all that happens, Doris?" he said.

"I will write to you once a week. I should write every day if I were still a child."

"Why, little woman?"

"Because children do just what they like, and because I shall so want to speak to you, to fancy I am close beside you, as now, telling you what is in my heart."

Basil was touched with pity for the girl who had to take up the woman's burden so early.

"Do you wish you were a child again?" he asked.

"Oh, no, no!" she answered quickly. "Look at poor papa—he is a child again; yet his childish content, I know not why, makes my heart ache. Tell me why it is."

"Because mere content is not the highest gratification of our nature, and should not be, Doris. Do you not feel that it is nobler to care for papa than for the pets on your Ile Content? Yet one duty makes your heart ache, and the other gave you pleasure."

"I don't know that I feel nobler; but it makes me glad to be of use. I would be a woman for his sake; but for all that, when I am alone I would be a child, to pour out my heart to you, and tell you how happy or how sad I feel."

"If a sou'-wester and oilskins were not so unbecoming to me," said Basil, wishing to turn the conversation from its painful course, "I would give up art, and be a fisherman here, just to listen to you, Doris, and laugh and sigh with you. But, of course, you would have nothing to say to me in an unbecoming dress, would you?"

"You could never look half so nice in any other coat than that; but if you were even quite ugly I should love you all the same."

Doris had need of all her fortitude when Basil left Ribleigh. For days she found it difficult to swallow her grief, to keep back her tears, to show a brave front, and "be a woman," as she put it.

"There is no one to confide in and trust to now you are gone," she wrote to Basil; "no one to encourage me with sympathy or scold me when I am silly. I seem to stand all alone, with a heavier burden than I have strength to carry. Papa, I am sure, is better, yet his condition appears to be more terrible than ever. It is dreadful to see him that I relied on dependent upon me, and I only a girl, and not of the wisest. I think I should break down and cry if Mère Duval did not vex me so. There never was such an exasperating old woman. She complains from morning to night, and I believe takes a delight in filling the house with coal-smoke, just because she cannot get charcoal and a furnace such as she has been accustomed to use. She calls the tradespeople bête and miserable, simply because they cannot understand her wants, and she will not understand that their 'naginag,' as she calls it, is quite as good a language as hers. I write a list of things for her to fetch, and she purposely loses it, and drags half the things out of the shop windows to get at what she wants. Yesterday I had a difficult task in appeasing a fisherman's wife because Mère Duval had shaken her son and beat him for laughing at her tall white cap, which I cannot induce her to lay aside."

After a few weeks her letters became more cheerful, but she never failed to hope that Basil would find time to come before long to make her quite happy, if only for a little while. "I wish you would be a fisherman," she said once. "I'm sure it must be a very good trade, for all the men look well and happy, and so do their wives and sweethearts." Basil wondered if those words were written in mere simplicity, or whether they conveyed a deeper meaning. Soon after this she wrote: "There has been a terrible storm, and the poor women were walking past the house up and down all the day, with their poor faces all worn and haggard, and their eyes straining to see through the mist and scud the boats of their friends and relations. I was selfish. A great feeling of gratitude filled my heart, and I knelt down and thanked God that you were not a fisher." Again and again she spoke hopefully of her father's condition. "I am sure he begins to remember a little, and that his intellect is recovering, but a strange thing I have noticed which deprives me of the pleasure I should feel in this improvement. When his mind is clearer and brighter his body is weaker. His appetite fails at meal-times, he is weak, and complains of 'feeling old'—Is it not odd? It is quite contrary to what the physician in Paris said about '*mens sana in corpore sano*,' n'est-ce pas? I have thought about it a good deal, and the idea has occurred to me that his physical recovery from the great shock brought about by excessive mental excitement has been due to the repose of his faculties since, and this leads me to fear that he cannot again enjoy health of mind and body together. I hope that I am quite wrong in my reasoning, and am only yielding once again to girlish fears. Scold me, and I shall be happy." Her following letters for some weeks brought news of the major's health which confirmed but too surely the suspicion Doris had formed. The major began to talk about Andely and Ste. Marie, asking questions relative to the disposal of the island, the workshops, and his tools; at the same time he grew thin, the careworn expression returned to his face, he could walk to the beach and back only with great bodily fatigue. There was no special derangement, but his whole physique was lower, weaker, his vitality less than it had ever been. He fell asleep suddenly and frequently during the day. He refused to think of moving with a view to finding strength in another place.

Her last letter was followed, two days later, by a telegram, asking Basil to come at once. Basil obeyed. The door of the cottage at Ribleigh was opened by Doris. She caught his hand in both of hers, looking into his face with speechless gratitude; she hesitated for a moment, then put her two hands on his shoulders and kissed him.

"Papa is asleep in his room," she said, leading him into the sitting-room. "He has changed greatly since Monday, when I wrote. He has been angry—angry at the mention of your name! He seems quite calm and reasonable, just as he used to be; but, oh! he is as weak as a little child. He has told me to prepare for a journey."

"Where does he intend going?"

"He will not say, but I believe to Les Andelys." Basil sat down without a word. "He can never make the journey, Basil," said Doris. "As he sat in the arm-chair packing the valise by his side, he fell asleep. He sleeps there now, supported with pillows that Mère Duval and I arranged around him. He has eaten nothing but potage since Sunday."

"You say that his memory has returned?"

"Yes, to an astonishing degree. On Sunday he seemed to recollect all that had occurred recently; but on Monday he told me how he had purchased the bear, and asked me whom it had killed. Yesterday his recollection extended right back to the past, and it was then that, mentioning your name, and saying how you had settled his affairs, he became furiously angry, and said we must leave England at once."

Mère Duval called from above: "Mam'selle, monsieur awakes."

"Take me up-stairs, Doris," said Basil.

They went up to the major's room, where he sat in a chair, his arms resting on the elbows, and his hands hanging limp and useless. At his direction Mère Duval was filling the valise.

"I have brought a gentleman to see you, dear," said Doris, as she and Basil entered the room.

The major rose with his old politeness, as well as his strength permitted, and bowed, then he sank into his chair again. "I have not the pleasure of knowing you; may I ask your name?"

"Basil Garton, sir."

The major looked at him quickly, with a gesture of surprise.

"A man named Garton robbed me once of a large sum of money," he said slowly. "I hope you are not related to him?"

"I am the son of Richard Garton, whom you remember; but he did not rob you, sir."

"He sold me mining shares that ruined me—it is the same thing." The major waved his thin hands expressively, and then with a firm voice said: "You are not responsible for the act of your father,



"THE MAJOR WAVED HIS THIN HANDS EXPRESSIVELY."

still I would rather not know you, Mr. Basil Garton." He signed to Mère Duval to open the door. Basil took no notice of the hint.

"I have not come to vindicate my father's character, but to do what he would have done were he still living."

"Is *he* gone?" the major asked, an expression of grief coming upon his face, for he could remember at this moment only what was good in the man who had been his friend.

"Yes. He was unfortunate, and grief accelerated his end." The major made a sign to Basil to continue. "He sold the Dolly Pentreath shares that he might meet the claims of another company in which he had invested money. He was ruined, and had to retire from the firm in which he had been senior partner."

"I forgive him!" murmured the major, dropping his head upon his hand. "I know what he must have suffered, and the temptation to which he must have been exposed. His family—you were unprovided for?"

"Yes. Happily I had talent as an artist, and contrived to keep my mother and the young children comfortable till she died, and they were able to struggle for themselves."

"Give me your hand, Mr. Basil," said the major; then in French: "Be good enough to close the door, Mère Duval, and place a chair for my visitor."

"And now, sir, if you are well enough to hear surprising news, I will tell you what gave my father much anxiety in his later years, and what I sought an opportunity to tell you when I discovered you living in Andely."

"A little wine, Doris; thank you. Mr. Garton, I am quite strong now."

Basil waited doubtfully awhile, then he said—

"As my father believed it would, the Dolly Pentreath Mining Company revived, and the shares you sent back to him valueless are now more valuable than ever. The accumulated interest is in the hands of the firm which my father represented when he was your friend, and probably, with the shares, amounts to fifty or sixty thousand pounds."

He stopped. The major, with his face in his hands, was sobbing; the tears slipped between his fingers and fell.

"May Heaven forgive me for the wrong I have done!" he cried. "I have doubted my friend, and have been punished. But my Doris and my honour are safe; I am tired with grief and joy; let me rest."

* * * * *

He sank rapidly. In ten days he died. Then Doris said—

"I am quite alone now, Basil." Basil could make no reply. "I have always had some one to guide me and care for me," she continued, "and I cannot live with no one near me but Mère Duval."

"Poor Doris!" he said, finding nothing else to say. After a little silence she asked—

"Do you think me a good girl, Basil?"

"I never knew one so good."

"And am I good and pretty too, do you think, Basil?"

"When I first saw you, you seemed to me like a graceful, beautiful young moon, Doris; and since then I have watched your development, until now you are like the full moon up there, which is not only sweet to look at, but sheds a beneficent light, giving a charm to everything it touches."

"You loved me as we stood by the river on that night after the fête of La Raquette, did not you?"

"Yes, dear."

"I knew that," she said, pressing his hand. "And nothing has shaken your love since?"

"Nothing."

"And if I am always good, and try to make you happy, you will always love me?"

"With all my heart, darling."

"Then I see no difficulty about the future," she said, with grave *naïveté*. "I need not live alone with Mère Duval, for you can marry me; and if I do wrong you can tell me of it, and I will do better then."

"Yes, dear Doris, if I am worthy to have such a sweet little wife as you."

So this quaint courtship was followed by a marriage and by years of happiness, which still continue.

* * * * *

A few days before his death, the solicitor from Lincoln's Inn brought an account of the major's financial position, and he made his will. It was simple. The money he had received in trust, with the interest accruing from its investment, was of course handed over to Doris; a few hundreds were left to Mère Duval, a souvenir to Ste. Marie, and the rest of his belongings to Basil Garton. He spoke once of his discovery to Basil. "The diagrams that you have," he said, "are, with certain alterations, those that I followed in the construction of the machine you saw. It weighed in itself fifty pounds, and carried a weight of twenty-five pounds. The springs alone weighed twenty pounds. I leave you to imagine, then, what might be done with an engine upon a larger machine. Aërial navigation is possible. One day it will be accomplished; but, for your own happiness, I do not advise you to become an inventor."

And Basil has thought not only of his own happiness, but of his wife's also; and a packet which he sealed up on the day of his wedding he has not opened since.

That packet contains the diagrams of Major Godfroy's Discovery.

THE END.

HOW BABY WAS SAVED.

BY PHILLIS BROWNE, AUTHOR OF "COMMON-SENSE HOUSEKEEPING," &C.



OUR first baby was a most wonderful child. He was a very large boy, to begin with; and he had such a quantity of hair—golden hair it was, and it lay in rings all over his head. Certainly he was rather red, and he puckered up his face so that we could not see his eyes, but when we did get a peep, we found that they were a glorious dark blue. He had an unfortunate habit of twisting his face as if he were in pain, so that we were rather alarmed for a little time; but nurse said it was nothing, "they always did so." It would be impossible to say how much we thought of this baby; and we were quite justified in doing so, for really he was a most unusual infant. He knew his father the day but one after he was born, and at first proved it by screaming the moment he entered the house, though afterwards he showed it more agreeably by giving up screaming the moment his father took him in his arms. He would be fed every time we sat down to a meal, and when once he took an idea into his head, there was no quiet until he got what he wanted. He used to sleep all day as soundly as possible, and wake up in the evening; so that we never could go out together, and never could have friends. Our leisure was taken up with him entirely. Before he came, Jack used to read aloud in the evening while I worked, but that was all over now. I used to look at fathers and mothers who had brought up large families of children, and think to myself, "Poor creatures! what must you have gone through!" And I wondered that they looked as well as they did.

Our baby slept so much in the daytime that he was often wakeful at night, and then Jack and I took it in turns to walk about the room with him, a quarter of an hour at a time. I am afraid I must confess that the discomfort arose from my not knowing how to manage him. Yet he throve through it all. After all, I did the best I could for him, and soon learnt wisdom by experience. Things looked brighter in a little while, and even baby settled down into his right place.

And now we came to a point in baby's life when we were in doubt as to what was the right course to pursue. Our little one was nearly three months old, and the time came for him to be vaccinated. A neighbour of ours, named Mrs. Gregory, had had a baby about the same time that I had, and her husband was very strongly opposed to vaccination. He declared that it was unnecessary and also injurious; that though intended to prevent one disease, it led to others which were as bad, if not worse.

Mr. Gregory was a very honest, well-meaning man, though perhaps not over well educated. There was no doubt about one thing: he believed that he was right, and he was very much in earnest. He said that healthy children frequently had their blood poisoned by having lymph put into their arms which had been taken from babies who were diseased in their bones, having inherited disease from their parents; and he said also that, no matter what he might have to endure, he would never allow a child of his to be vaccinated.

It was not to be wondered at that, feeling so strongly as he did on the subject, Mr. Gregory should try to persuade others to act as he was determined to do, and he was particularly anxious that my husband should see the matter in the same light that he did. He used to come to our house evening after evening, and bring anti-vaccination tracts for us to read, and tell us of cases in which mischief had followed vaccination, until we were quite miserable. I saw that Jack was most unhappy on the subject. He said that if he really were convinced that vaccination was injurious, he would cheerfully endure any penalty—pay fines, be imprisoned, and endure more than imprisonment—rather than that our dear little boy should be exposed to any danger.

Of course I thought he was right, and I loved him for caring so for baby. The question was, how should we best show our love and care for him—by letting him be vaccinated, or by refusing to do so? We had already received a notice saying that baby must be vaccinated before he was three months old, or we should be liable to a fine; and while we were talking the matter over, small-pox broke out in the neighbourhood, and our doctor urged us very strongly to lose no time, but to let baby be vaccinated at once. So we had to make up our minds, one way or the other, and very difficult work we found it.

One evening Jack came home with a very determined look on his face, and I could see he had made up his mind what he would do. I said nothing to him, however, but waited until he had had something to eat and had rested for awhile. He always told me everything, and I knew I should hear what he was thinking about when the right time came; and I was not disappointed.

We had not quite finished tea when Mr. Gregory came in. "Well," he said, "I have come to know if you have made up your mind about this matter. Are you going to submit to be tyrannised over, and let your child be injured, in order that doctors may make money, or are you going to be a man, and stand up for your rights and your baby?"

"I have made up my mind what to do," said Jack quietly. "I don't understand the right and the wrong

in this case, and I hear so many different opinions that I don't know what to think. You tell me that baby will be injured if he is vaccinated. I believe you are an honest man, and that you are saying what you believe to be true. But I believe that Mr. Edwards, on the other side of the way, is an honest man also, and that he says what he believes to be true; and he tells me that if baby is successfully vaccinated he will be safe from small-pox. Which of you is right? Which am I to believe?"

"Which are you going to believe?" said Mr. Gregory.

"I am going to believe neither," said Jack. "I am going to lay the matter before some one whom I trust, and who understands the subject, and that is my old friend Dr. Thornton."

"A medical man! Was ever such absurdity?" said Mr. Gregory, rising from his seat in his excitement. "Why, don't you know that doctors make money out of getting people vaccinated? They are the last people to ask, because it is their interest to keep it up."

"If they make money out of it, it is because it is their business," said Jack, "and I don't see that a man is less likely to know about a thing because he has made it his business. If I wanted my watch mended I should go to a man whose business it is to mend watches, and he would make money out of me; but I should get my watch set going in return."

"Yes, but that is different," said Mr. Gregory.

"I don't see that it is," said Jack. "Neither do I see why I should suspect a man's honesty because he wants paying for his work. We all have to make a living, and we generally suppose that people make their living out of something they understand. Besides, there are honest men in every trade, and I know Dr. Thornton is an honest man. If my wife or my baby were ill, I should go to him first thing, and I should place them in his hands, knowing that he would do the very best he knew. Why should I not consult him on this subject, which I know he has specially studied and thought over?"

"I consider the thing is lost," said Mr. Gregory, turning away. "Of course, if you go to a doctor he will talk you into obeying the law and having the child vaccinated. Doctors can always talk."

"I shall not have baby vaccinated because he talks only, or because the law orders it," said Jack. "I am going to tell him my difficulty, and ask him *why* he recommends vaccination. I think, seeing that he has studied the subject, he is better able to speak about it than people would be who had devoted themselves to carpentering and watchmaking. That is all. What I *do* will be determined by what I think best for baby."

"Well, of course you will do what you think best," said Mr. Gregory. "By the way, are you going now to see the doctor? You would not like me to go with you, I suppose?"

"Certainly I would, with all my heart," said Jack. "I should like you to do so."

"And I shall go, too," said I. "I also want to understand what is best for baby."

Fortunately, we found Dr. Thornton at home and disengaged. Jack at once laid the case before him. He told him of the different opinions he had heard, and how some people had told him that vaccination was a good thing and others that it was a bad thing. He wanted to know which was right.

Dr. Thornton listened very gravely. When Jack had finished, he said, "I am very glad you have acted as you have done, and determined to inquire into the subject before you allow your child to be vaccinated. I know that there has been a great deal of agitation lately as to the beneficial effects or otherwise of vaccination. As you say, some people say one thing and other people say the opposite, until simple-hearted folk do not know what to believe nor what to think."

"That is just it," said Jack. "We hear so many different opinions, we don't know what to believe nor what to think."

"To my mind," said Dr. Thornton, "it is not wise to follow other people's opinions about anything. If you do so you will constantly go zigzag, because you will follow the last speaker. There is no reliance to be placed on popular opinion: it changes with every wind. But there is a better guide than opinion."

"And what is that?" said Jack.

"It is *fact*. My advice to you is, acquaint yourself with the facts of the case, form your own opinion from them, and act upon that, and your way will be straight before you."

"And what are the facts?" said Jack.

"I will tell you what I believe them to be, from the returns published by the Registrar-General," said Dr. Thornton. "You must remember that these returns have been quoted by those opposed to vaccination as well as those in favour of it, and their correctness has not been questioned. Of course you know that, years ago, the deaths from small-pox were far more numerous than they are now, and that the disease was a perfect scourge in the land."

"I believe that to have been the case," said Jack.

"Well, then, for the facts. The Compulsory Vaccination Act was passed in 1854. The deaths from small-pox were less by one-half *after* this Act was enforced than they were before. In certain places where vaccination has been efficiently carried out, small-pox has not appeared for years. Small-pox has been felt most severely in places where vaccination has *not* been efficiently carried out. During recent epidemics, out of every five people who have died of small-pox, four have been set down as unvaccinated to one as vaccinated."

"Oh, then you see that some even of the vaccinated die of small-pox?" said Mr. Gregory.

"Wait a minute," said Dr. Thornton. "I am now going to give you some facts supplied by a gentleman who was for forty-one years resident medical officer of the old Small-Pox Hospital."

"He ought to have known something about it," said Jack.

"He did know something," said Dr. Thornton. "He said that although the deaths from small-pox among persons who were supposed to be vaccinated averaged over 8 per cent., yet even among these the

mortality varied. It was less than one per cent. among those who had distinctly-marked scars of vaccination; ten per cent. among those who had defective arm-marks, and twenty per cent. among people who only *said* they had been vaccinated."

"You think, then," said Jack, "that deep scars on the arm show that vaccination has been effectual?"

"I cannot say that is the only point of importance," said Dr. Thornton, "for the size and character of the scars have also to be taken into consideration. I am quite convinced, however, that the reason why we have small-pox amongst us is that people are contented with being vaccinated when babies, and do not get re-vaccinated when they are grown up."

"Get re-vaccinated!" said Jack. "I never thought of such a thing. Then my wife and I need to be vaccinated as well as the baby?"

"Certainly you do," said Dr. Thornton. "There is no doubt that after a time the good effects of vaccination die out, and the business needs to be done over again. When vaccination takes successfully, the patient is safe for some years, but not for life. *Remember that it is only recent successful vaccination which secures absolute immunity from small-pox.*"

"Oh! Well, after all, that is only opinion," said Mr. Gregory; "I thought we were to have fact."

"True. When I spoke I gave you my opinion. I will now give you the facts which led me to form it. Mr. Marson, the surgeon of whom I spoke just now, says that the nurses and attendants at the Small-Pox Hospital who have been successfully re-vaccinated enjoyed absolute immunity from small-pox, although they were exposed to infection in its severest form. Further, that *no death from small-pox has been recorded* of a patient who had been efficiently re-vaccinated."

"In the face of facts like that it seems criminal to neglect vaccination," said Jack.

"Don't go so fast," said Mr. Gregory. "I admit that Dr. Thornton's facts prove that vaccination prevents small-pox; they do not prove that a child may not, through vaccination, get some other disease which will be almost as bad."

"Quite true, quite true," said Dr. Thornton; "I believe that in an infinitesimally small number of cases, owing to carelessness or the ignorance of the practitioner, disease has been transmitted through vaccination. It has happened that the child from whom the lymph was taken was diseased, or the operation has not been properly performed, and the result of vaccination has been harmful."

"Ah! I am glad we have come to this. This is my point," said Mr. Gregory.

"Very well," said Dr. Thornton. "Then I say to you, if you are uneasy on that account, you can be vaccinated straight from the calf."

"Do you think—is it your opinion—that this is really necessary, Dr. Thornton?" said I.

"No, I do not. If I were a private individual, and were going to be vaccinated myself, I should go to the public vaccinator. These men understand their work thoroughly; they know what lymph to avoid, and have the best opportunities of giving such vaccination as will protect. I know you will be surprised to hear me say it, but I believe that there is no vaccination so likely to be efficient as public vaccination, and chiefly because it is done directly from one baby's arm to another."

"Well, doctor, I am very much obliged to you," said Jack. "I am thoroughly convinced. I will have baby vaccinated by the public vaccinator to-morrow. Now I want to know about re-vaccination. How often ought grown-up people to be re-vaccinated?"

"All those who have not been vaccinated since they were infants ought to be re-vaccinated at once," said Dr. Thornton. "If the re-vaccination is successful, or 'takes well,' as the saying is, they may be satisfied so long as the marks remain distinct. If the re-vaccination does not take, they should be vaccinated again every two or three years, especially if there is an epidemic of small-pox."

"And what about the re-vaccination of children, doctor?" said I.

"Children who have been successfully vaccinated when infants should be re-vaccinated when they are about fourteen. Then they may be considered safe for life, if the marks remain distinct. Children whose vaccination is not successful should be vaccinated again and again at intervals of from two to three years. They cannot be considered safe until vaccination has been effectual."

"You take plenty of trouble about the matter," said Mr. Gregory, as we rose to take our leave.

"Trouble! Of course we take trouble," said Dr. Thornton; "and it is well worth it. Take the word of an old man, my friend: the longer you live, the more you will find that you never get anything in this world that is worth having without paying its price in one way if not in another. Very often you pay most heavily when you think you have got a thing for nothing; and you are very fortunate if all that you have to pay for a great benefit is a little trouble."

As we were walking home, Jack said, "Well, shall you have it done, Gregory?"
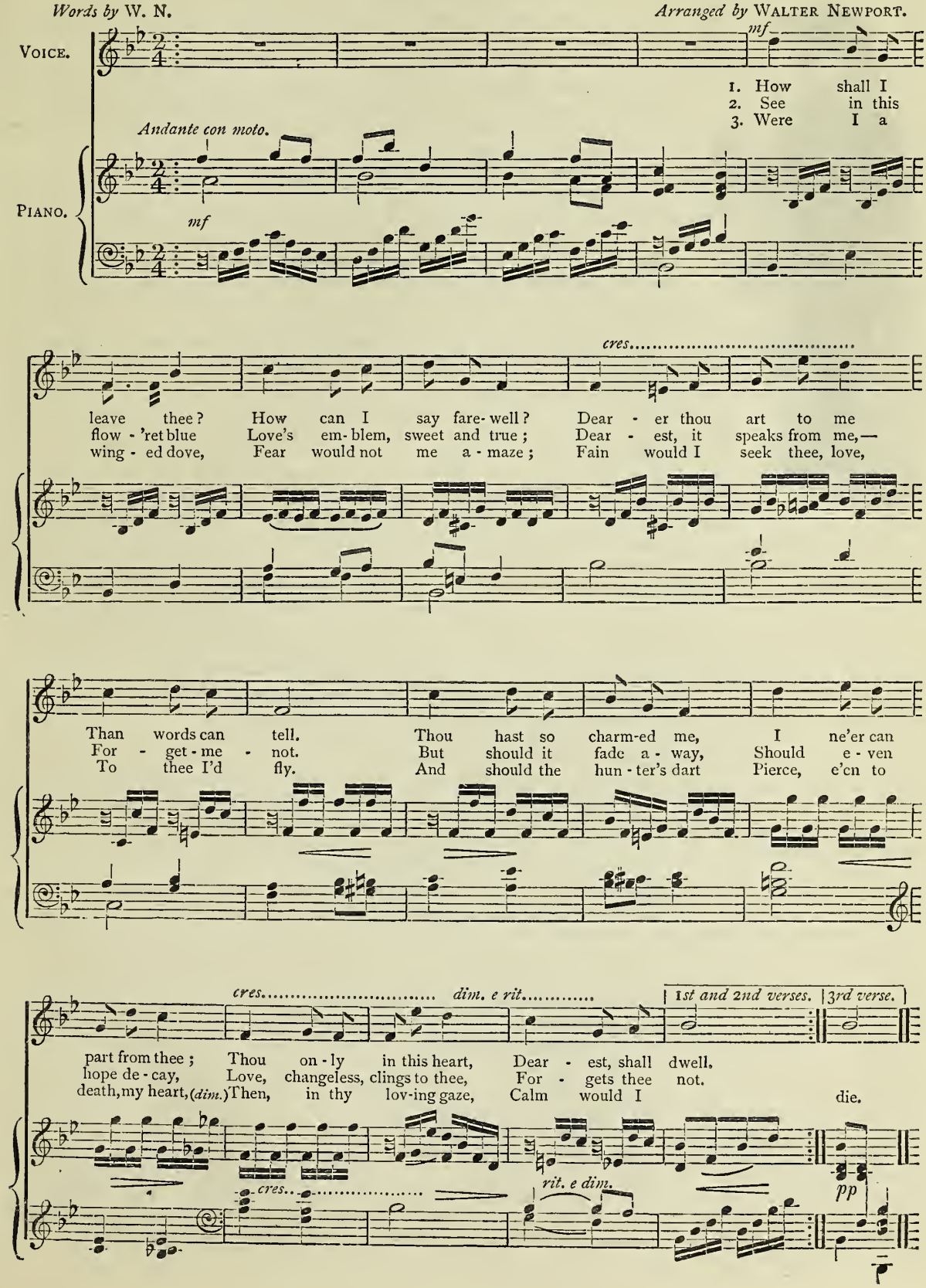
"Yes," said Mr. Gregory, "I shall. But I shall have to pay more than the trouble of the thing; I shall have to give up a prejudice, and that is not easy work."

"You are right, it is not easy," said Jack; "but we can do more than that to save our babies."

So we were all vaccinated; and in a little while how thankful we were for it! Small-pox, which had been talked about for a long time, at length broke out in our neighbourhood. Little children and grown-up men and women were attacked by it, and some died, and others were disfigured for life, so that they were glad to hide their faces from their friends. People fled from those who were smitten by the dread disorder, and did not dare to give help and show sympathy, for fear they also should be stricken. In the midst of it all our little ones were safe. The evil was there, but the remedy had been found. We had been persuaded to accept the teaching of fact, and so our babies walked securely in the midst of danger.

"Forget Me Not."

Words by W. N. *Arranged by* Walter Newport.



HOW TO TRAIN A CHILD PHYSICALLY.

BY A FAMILY DOCTOR.



THERE is no prettier sight, to our way of thinking, than that of three or four rosy-cheeked children at work on a hearty meal. Yes, I said "work," and I do not mean to correct myself, for if they be at all healthy, and consequently not at all over-dainty, and if they have had plenty of previous exercise, and unstinted running (out of doors), it will be no play, I assure you, but a downright labour of love. So I call it a pretty sight, albeit there may be a good deal of unscientific fencing, unnecessary slopping and face-smudging.

But how often, during a banquet like this, do we not hear such remarks as the following from an alarmed governess!—"Oh! Johnnie, the other hand, please, the other hand. How often, child, do I not tell you that you must learn to eat with your *right* hand?"

Poor Johnnie has not been very long "on to" spoon-drill, and has been digging away indiscriminately, ere he attracted the gubernatorial eye, shifting the spoon from hand to hand, and doing equally grand execution with either. He now stares at the governess with round wondering eyes for a few brief seconds, trying perhaps to guess which is the right hand, or what harm the other hand has done, that it cannot be considered right as well as its neighbour. But dinner with him is far too serious a business to be interrupted by conversation, so he wastes no words, but goes on again ploddingly as before.

Well, although the laws of society demand that we should use both spoon and knife with the right hand, nevertheless poor Johnnie's actions must not be put down entirely to awkwardness; and, with the exception probably of what I have called spoon-drill, a child should be taught to use both hands alike, and with equal facility—to be, in other words, ambidextrous.

I have not space to enumerate the advantages a man or woman has, who is possessed of the power of ambi-dexterity. A person may study using the left hand as well as the right, in after-life, but he will never become so expert as if he had been used to it from childhood. The physical development of children is very much neglected in this country. I would not have young people grow up as athletes, but I would have them possess that amount of physical power which is compatible with good health and a sound constitution. Such a training is sure to do them good service in some dire emergency.

First and foremost, then, do not expect your child to be capable of even ordinary training, unless he is in sound health, and unless he gets fair play in the momentous matters of cleanliness, good food, and fresh air.

I will say a word about cleanliness first. We all remember the proverb anent it, and it is a true one. From their very earliest infancy children should be kept cleanly, both in person and clothes, and as soon as they can toddle they should be taught to keep at least their fingers clean. I shall not here say anything physiologically about the benefits of cleanliness, and the health of the skin—I have done so in numerous articles—but merely say that no child can be healthy who retains effete matters *in* his blood or *on* his skin.

The bath should be a daily and not a weekly or Saturday night affair in every family, and those who can afford it should have a children's bath-room, under good supervision. For the water should neither be too hot nor too cold, but tepid, and if the child can bear it, almost cold. It ought to be taken in the morning before breakfast—it is ruinous putting a child into the water after a full meal—the body ought to be immediately rubbed dry and dressed, and after this, but not before, the child may be encouraged to romp or play, but no romping during the bath should be permitted if it tends to keep him in the water longer than is necessary for purposes of perfect ablution. The mildest of plain soap should be used.

I have known children taught the art of swimming to some extent in a large bath.

Children's clothes, as I have said before now, ought to be light and warm, easy-fitting; the feet should be kept warm by soft light socks, and the head cool. Never sweat a child by hot-water bathing, by over-clothing, nor in his bed at night, unless you want to make him a hot-house plant, to grow up puny in body and feeble in mind.

Out-door bathing for older children should be encouraged. Shade of my childhood! do I not remember those pre-prandial plunges in the mountain streamlet, and the scamper half-dressed along the banks that succeeded! Exhilarating, healthful, glorious!

Whole armies of children are sacrificed annually in this country to the demon foul air. And the altars on which they are immolated are the school-room, the nursery, and the bed-room. The Government school-room is a great institution for developing the minds of children, but—in many instances—woe is me for the health of their bodies! Let no one returning from a long walk in the country enter one, or pass too near the door thereof, while the children are at work. This evil could be easily remedied, however, by a process of scientific ventilation not dependent upon windows.

The nursery ought to be kept the perfection of cleanliness; the floor should be of wood, uncarpeted, and scrubbed almost every day, and the air within should be as pure as that without.

As to the child's bed-room or night-nursery, I almost despair to think of it, so seldom is it properly ventilated, and so often too small and stuffy.

Mothers, pray think of this, for assuredly your child's future health, nay, his very life itself depends more upon the air he breathes than on the food he eats.

I may only summarise the rules of health as regards the diet of children. Begin early, if the child be puny and weakly, to give a little strengthening pap, to which even a little beef-tea may be added with advantage. If, on the other hand, the child thrives well on the mother's milk, let it have that and nothing else till the careful time of weaning begins to approach. As soon as the teeth come, it is a sign that nature needs something more stimulating than milk. Very young and delicate children should only have the very lightest and most easily digested food, of an animal and vegetable kind in due proportion; frequent change of food is desirable and necessary; feed regularly and give, if possible, no intermediate meals of cake and pudding, &c. At meal-times the child must be taught to eat slowly, and take little bits at a time; do not let him over-gorge; give no wine, nor too much tea or coffee—I would say none at all, only I feel I should not be obeyed—give nothing too hot; give ripe juicy fruits in season.

Simple enough are these rules, and probably the reader knew them all before; but simple though they be, they are seldom acted up to.

All I need say about the sleep of infancy and childhood is very brief. When a child does not sleep well, depend upon it that his physical development is being retarded; and if there be no actual disease, the cause is want of attention to proper food, cleanliness and exercise, or a badly-ventilated apartment, with or without an ill-arranged bed. The rules, then, to be observed in order to gain for children sound refreshing sleep are briefly as follows:—First, send them early to bed, that is if you would have them grow up strong, well-developed youths and men. Nothing can be more injurious than the habit of letting them sit up late among their elders; and I may add that children's parties should never be prolonged beyond eight or half-past eight. At the very best I do not approve of them; they are neither conducive to the health of the child nor to his future well-being.

The sleep a child requires is greater than that needed by an adult, but still it should not be overdone. The quantity depends on the age; for a child of six, ten and a half hours would under ordinary circumstances be sufficient for needful repose. The bed-room should be large, clean, well-ventilated, kept at an equable temperature, and dark. Night-lights are objectionable, and injurious in more ways than one. The air should be very pure, and the bed-coverings light and warm.

Now, if all the hints I have already given in this short paper be adopted as a rule, the medicine-bottle in any shape or form need never find its way into the nursery cabinet. A child who is not dosed with physic usually grows into a man who seldom or never needs it.

Exercise is the last but not least important portion of my subject to be treated. I suppose my first duty is to say a word or two about teaching children to walk; it may be said that all mothers know how to manage this perhaps, but they are often guilty of grave errors notwithstanding. Nature in this respect will not be forced. A young child's bones are soft and cartilaginous, and keeping a poor little thing tied up against a chair, when it ought to be lying on its back kicking the air and strengthening its limbs, or crawling on the nursery floor, is positively injurious and sinful. It is done, I know, with the view of teaching it all the sooner to maintain the erect attitude; but bent legs may be the result, and however strong a bent-legged man may be, he certainly does not look elegant. Let the child creep, then, and as soon as he finds that he can pull himself cautiously up, and stand by the side of a box, he will do so: this is the only safe and natural process. Soon after this he will, if encouraged, venture upon what parents call the first step. Let him creep, and when he walks and falls, laugh at him; unless you want to make the child an idiot, do not rush to pull him up. Children are not at all brittle, and they ought to learn at a very early age to depend upon the strength nature has endowed them with. Some nurses tie a band around a poor child's waist, and then shove him kicking and sprawling on before them, during which time the child looks as graceful as the golden lamb which hosiers hang out as a sign. The practice is *most* injurious.

As soon as children can run about they ought to be allowed to spend all the time possible in the open air, taking care not to let them get wet, and taking them home before nightfall.

I have often made the remark that work is not exercise, that exercise to be beneficial must be congenial to the mind, as well as the body, and this is doubly true as regards children. Encourage them to play therefore and romp *ad libitum*, and if possible find them companions of their own age. A boy brought up with only his sisters as playmates will usually turn out a soft and selfish man.

It is not a good thing to commence teaching a child to read too soon, but I beg humbly to differ from those who say they ought to be taught nothing until they are six. They should read and write tolerably well by the time they are seven. Great men, with few if any exceptions, have well-developed heads and brains. As far as size goes, the brain cannot be developed after the sutures of the skull close, and size of brain has a deal more to do with cleverness than many imagine—mind and matter cannot be separated. But never let children sit too long poring over their books; ten to one they are but dreaming or dozing and doing no good, but only weakening their frames and bending their spines.

Teach children to sit erect whether reading or sewing, but remember that they cannot keep them-

selves in any one position long at a time, however graceful it may be.

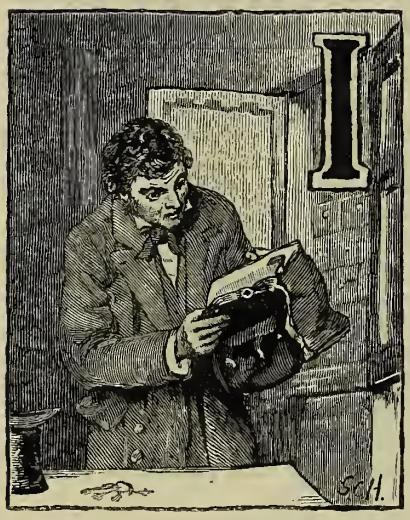
While play is good, running races is to many children highly dangerous, owing to its tendency to produce congestion of the brain, to which the young are far more liable than the old.

The swing is a capital thing for enlarging the muscles of the arms and chest. It is a kind of exercise, too, that is both pleasurable and exhilarating. Rowing in boats is to be commended to older children. You may tell me it is dangerous. Well, it teaches caution, and it exercises the muscles of the eyeball, and if you talk of danger I have my answer—*teach your child to swim.* If I were to enumerate one-half the benefits to be derived from the exercise of swimming this paper would be far too long. In all exercise beware of over-fatigue and over-heating of the blood.

A JEWELLER'S STORY.

CHAPTER THE FIRST.

MY JOURNEY.



IT was on the 29th of October, 1859, that I was returning to England, having taken the steamer at Dublin for Holyhead. Business had taken me to Ireland—I am a jeweller—and it had been necessary for me to visit a branch of my own firm in Dublin. I was bringing back certain valuable jewels which required re-setting—diamonds of great value, and some other things of less importance, but still valuable.

I found all the passengers talking on one subject—the terrible and appalling wreck which had occurred only three days before, off Moelfra, on the Anglesea coast. No less than 446 lives were lost that night when the *Royal Charter* was totally wrecked. She was a screw steamer, commanded by Captain Taylor. A large sum of money—£700,000 or £800,000 in gold—was lost also, it was supposed; but I have since heard that some of the gold has been recovered. I am a silent man habitually, and the awe in the voices of my fellow-passengers struck me forcibly; but I had another reason, as will presently appear, in remembering my journey from Dublin to London on this occasion.

I carried the jewels which I have already mentioned in a small black handbag, and so long as I knew that it was safe, I was free from care. Arriving at Holyhead, I took my seat in an empty first-class railway carriage. Just as the train was moving off, however, a gentleman suddenly got in. He sat down nearly opposite me, so I had a good opportunity of observing his appearance. I noticed that he was young, apparently not more than four-and-twenty, that he had a broad black band round his hat, and that on his face were traces of recent sorrow, almost in fact of agitation. He seemed relieved at having caught the train; and being like myself quite disinclined for conversation, our journey proceeded in silence.

My bag lay beside me, and quite under my eyes. I was tired after my crossing, and fell into a sort of doze. On waking I instantly glanced at my bag. There it lay, quite safe. My companion, however, had moved his seat. We stopped at Chester, and here I thought I would get out and walk about a little, as we had ten minutes to wait. I took my bag and got out. On my return to the train there was my companion apparently asleep. I got into the carriage without disturbing him, and we continued our journey. At Crewe, our next stopping-place, he got out, and did not come back. I was very tired now, and fell into a sound sleep with my hand holding the handle of my black bag. I did not wake until we reached London, then getting into the first hansom I saw, and still carrying my precious bag of which I was heartily tired, I drove home. On my arrival, with a method which I suppose is habitual to a man in my trade, I instantly went to the safe in which I keep valuable jewels, unlocked it, and depositing the bag on a table, I opened it. Imagine my dismay at finding that, instead of my diamonds, it contained only some rusty bits of iron, and wooden débris. *My* bag was gone, this other bag had been cleverly substituted for it, so cleverly indeed that even the weight as well as the appearance had been judged.

I put the affair into the hands of the police, giving them exactly every particular as I have here written it. The bag was lost.

CHAPTER THE SECOND.

MY SEARCH.

A YEAR after the events narrated in the last chapter, I was again travelling on the line which takes passengers to Holyhead. It was in the beginning of October as well as I remember.

I travelled first-class, my usual custom when I have a long journey before me. During the year, not a sign had been given of my missing bag or the jewels, but I had not really despaired yet of recovering it and them, for I had a certain unaccountable feeling about the whole thing; that there was some mystery about it, I felt sure.

Regularly every Wednesday in every week I had called at Scotland Yard, and always had the same

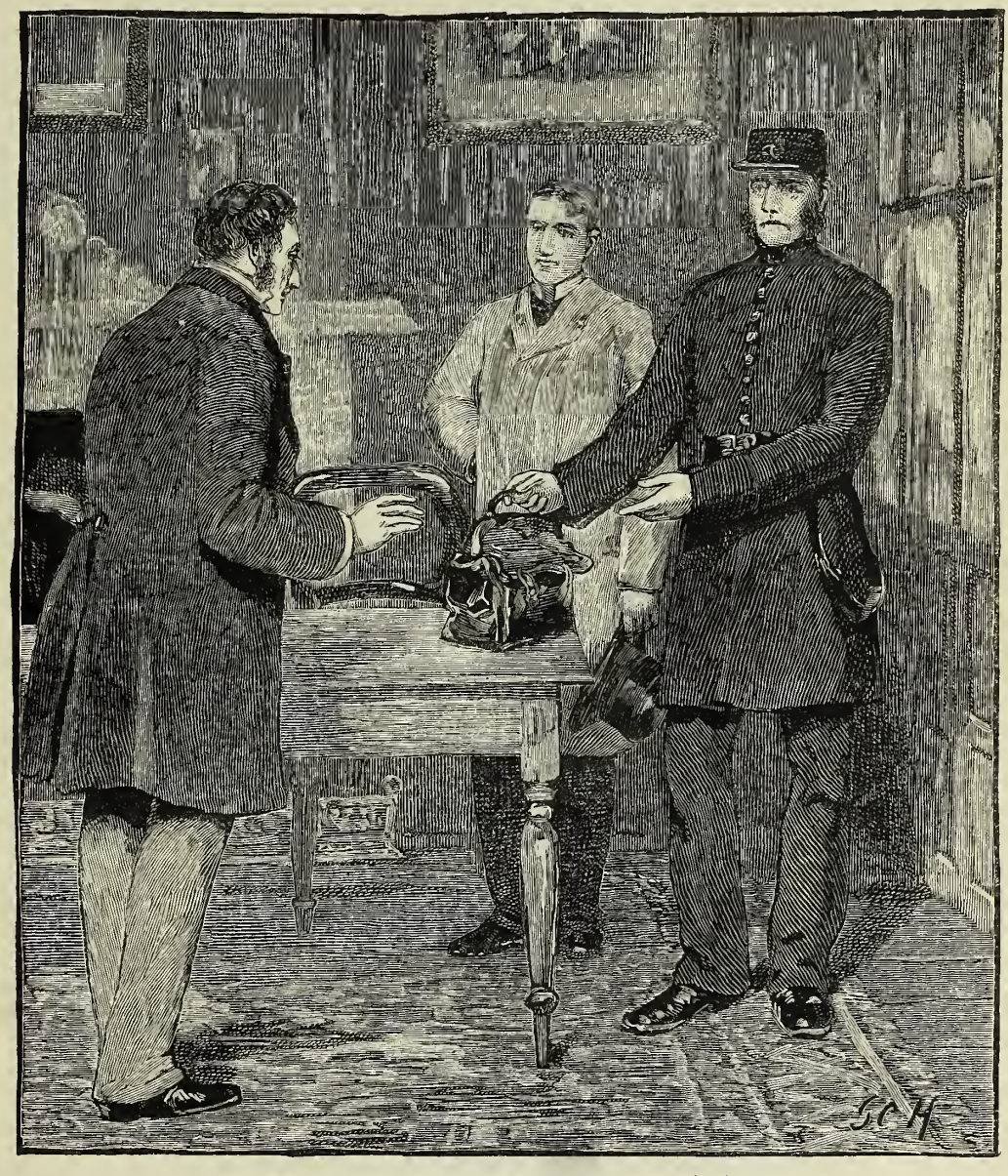
answer, "Nothing yet, sir." The reward I had offered was sufficient to insure a certain interest, and the police, I firmly believe, were as keen in the matter as I could wish.

On this October morning in 1860, I travelled with a lady who was in deep mourning. The day was chilly, and she wore several wraps, but getting warm in the carriage, she presently threw aside a fur cloak she was wearing, and my eye was instantly attracted by a handsome brooch she had on, in which was a portrait.

Without appearing to do so, and with a sudden feeling of interest and curiosity for which I cannot account, I managed to get a nearer view of the portrait. It was the face of the young man who had travelled with me the year before when I had lost my bag. I was so certain of this that I resolved not to continue my journey until I had acquainted the police with this fact.

The train stopped at Crewe, the place where I remembered the young man had left the train on our up journey the previous year. Here the lady alighted —I did also. A carriage awaited her at the station—I secured a fly, and directing the driver to follow the carriage, I discovered where the lady drove to. Her own house evidently. She appeared to be in an excellent position, and to be wealthy.

I was not deterred by this discovery, for I felt I could not be mistaken about a face which, though I had certainly noticed it only in a casual way at the time, had nevertheless been stamped upon my mind, and connected in such a manner with the loss to me of several thousands of pounds.



"FIRST HE PLACED ON THE TABLE MY 'BLACK BAG'" (*p.* 754).

I went to the police station, told them what I had seen and what my suspicions were. They listened attentively to what I said, and then told me that I must be mistaken: that the lady in question was well known, the widow of an officer who had died just after coming into a large property in the county. She had had two sons. One had been in the navy, and had lost his life in the wreck of the *Royal Charter* about a year previously. The other was expected home every day, and had been away almost ever since the end of last October.

It was impossible, they said, to make inquiries in such a direction. Ill-satisfied and disappointed, I found myself compelled to leave matters as they were; but on my return to London I wrote to the head of the police once more, and reiterated my convictions so forcibly that he evidently was impressed by what I said. The result of my letter came, after a brief acknowledgment from the inspector, in the visit of a gentleman four days afterwards.

CHAPTER THE THIRD.
THE DISCOVERY.

I WAS standing in my shop; it was a dull morning in November, and the visitor who came in spoke first to my assistant, who referred him to me, and then in a moment I recognised my fellow-passenger. Not wishing to make everything quite public, I led the way to the inner room I reserved for myself and handed the gentleman a chair. He was too excited to sit down, but began his story at once.

"You remember the day I travelled with you from Holyhead, sir?" said he. "Perfectly," I replied. "I have too good reason to remember it."

"So have I. I had been on the Anglesea coast all the night before, searching for some relic, perhaps the body, of my drowned brother. I had only twenty-four hours, and was obliged to hurry back, with only a few bits of wood and iron gathered from the wreckage which strewed the beach; these I put into a small black bag."

"A black bag?" said I, "had you a black bag too?"

"Listen," said the gentleman. "I saw that you had one, and I remarked that it was like mine—so much so that at Chester, where you got out and I did not, you may remember you took *my* bag with you instead of your own. I felt sure you were coming back, for you had left your coat and umbrella in the carriage, so I did not follow you."

"Yes," said I, getting excited, "but that does not account——"

"Wait a moment," said the gentleman. "I know perfectly what you would say; it does not account for my not advertising your bag or making some sort of sign all this time—quite so—you will understand presently how it has happened."

I sat down, and begged him to do the same.

"When I got out at Crewe, I took as I supposed my bag. When I reached home I found that my poor mother, whom I had left in the most utter grief and prostration at my brother's death, had not rallied at all; I told our doctor, who was there, that my search for any personal relic of my brother had been fruitless, but that I had a few bits of iron and wood from the wreck.

"The doctor advised me to say nothing to her about it, not to tell her even that I had these sad relics. I put the bag just as it was into a cupboard in my own room and locked it up. That very day I had to leave England. I had a business engagement which took me to Australia. If I broke the engagement it would have involved my mother in considerable pecuniary loss. She knew I had to go, and as she did not urge me to stay, and as my sister and her husband were with her and could take care of her, I left the house that very day, and journeyed back north to Liverpool, just in time to catch my steamer bound for Melbourne.

"I only returned yesterday morning. The first thing I heard after greeting my mother was 'Where is the bag you brought with you from Moelfra?

"'In my room,' I said.

"'Get it for me,' said she.

"Without another word, though I wondered how she had heard of it, I went to my room, unlocked the cupboard, found the bag just as I had left it, and took it down-stairs.

"I was just going to open it when, to my still further surprise, my mother said, 'Are you quite sure that is your bag, Arthur?'

"I looked at her in astonishment. 'Well, mother, I said, 'I am as sure as a human being can be of anything.'

"'Did you open it after you came home, dear?' I thought for a moment, and then said, 'No, I am certain I did not. I could not bear it.'

"'Then,' said my mother, 'be prepared for a surprise. I think you will find that you have some one else's bag.'

"I did not answer, for I was trying to unlock the bag. 'It is very odd,' I said, 'my key won't open it.'

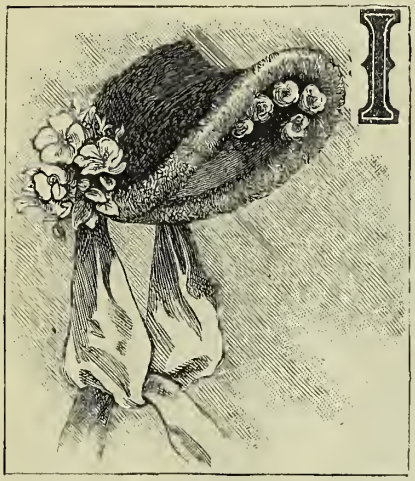
"My mother rang the bell, and in walked the inspector." Here my visitor ceased speaking, and walking hastily to the shop-door, he beckoned to some person seated in a hansom cab close by. It was my friend the inspector of police at Crewe. He continued the story. But first he placed on the table my "black bag." "There, sir," said he, "is your bag—you were quite right—this gentleman took it by mistake. That morning when Mrs. —— sent for me, I found the bag unopened. I forced the lock, and found your name inside the bag. The contents are intact, as you will see."

I opened my safe, and before I would allow them to open my bag, I took his from the shelf, and placing it beside my own, we all three saw that in size, make, indeed in weight, they exactly resembled each other.

Although I felt that I had really made the discovery myself, I cheerfully paid the inspector the cheque he deserved for the clever and prompt manner in which he must have conveyed my suspicion, a decidedly awkward one, to Mrs. ——.

WHAT TO WEAR.

CHIT-CHAT ON DRESS. BY OUR PARIS CORRESPONDENT.



IN my last letter I gave you some account of the new materials preparing for autumn and winter wear, and as the season progresses a few more have come into the market. Nevertheless, notwithstanding the novelties, plain serges, cashmeres, merinoes, and nuns' cloths, with superfine cloths, will be as much worn as anything else; indeed, Frenchwomen give them the preference over all fancy stuffs, except perhaps Scotch checked and plaid goods, which they make up most skilfully. Scandinavian tweed is a cheap and useful fabric, sold in plain solid colours, and a mixture of two, such as sage and olive. Box cloth is soft, thick, light, and warm, and always of two colourings, such as red and dark peacock, sage and old-gold. Peacock is a tone which the shops do not now recommend, but the Princess of Wales and several leaders of fashion affect it, so that it is sure to be good style. We on this side of the Channel hear much about the Anglo-French Treaty, and the chances of its renewal, and I dare say you in England are taking an interest in the British Woollen Association, originated by the Countess of Bective, and flourishing under the auspices of Princess Christian, Princess Beatrice, the Duchess of Teck, and most of the duchesses and countesses in England. Its object is to promote the use of materials made purely of English wool by English manufacturers. England, it is said, has fallen on hard times: there is much agricultural depression, and it is hoped this movement might in a measure be alleviated by finding a more ready market for the sheep's wool, and also by inducing the farmer to rear a better class of wool-producing animal; there is much depression among manufacturers, and it is hoped also by helping to sell their goods benefit may accrue to them. If women of fashion wear certain things, they may become *la mode;* and they are promising to wear these stuffs of English manufacture. But looking at this question from the French side of the Channel, I cannot help saying that I trust the Bradford and other manufacturers will not so much assure themselves that the English public will wear what they make, as endeavour to make what they wish to wear. An English shopkeeper in Paris the other day showed a Bradford man a pile of goods from his town, which he offered to let him take back again at almost any price he would name. "The tide is setting in towards Bradford goods, you may benefit thereby." The manufacturer shrugged his shoulders. "Thank you, sir; no one would wear that sort of stuff in Bradford"—which speaks volumes.

Woollen goods are decidedly more worn than they have been for years, far more than silk, for all but full-dress occasions. You will now wish to hear how such dresses are being made. The tailors keep to plain skirts and braiding, with sometimes two deep kilt-plaitings, on which they bestow more care than dressmakers, for the kilts keep in their place until the gown is worn out. Some of the bodices are made to fasten diagonally and some on both sides of a square piece set in front, as low as the bust, whence starts a single row of buttons. Polonaises are also affected. Dressmakers favour full bodices for soft materials, and the difference in them is merely in the gatherings. Occasionally they are gathered on the shoulders and at the waist, sometimes as a circular collar, sometimes distinct pieces are laid on the outside of the back and front and gathered, and occasionally a gathered square piece is laid over the bodice, drawn all over. But thick materials are still made as jackets, with basques of equal length all round, or pointed back and front; and some are pointed bodices, with gathered festooned tunics laid beneath. If any of you contemplate having a plain serge or cashmere dress, and are desirous of possessing a really handsome gown at only the cost of some industry, cut off your flounces ten inches deep, and trimmings for the bodice half the width, and embroider them in self-coloured wool or silk, with the same patterns used for cambric frills and Madeira trimming, button-holing the edge and sewing or overcasting the holes. This is the latest fashion. If also you happen to have had a cotton summer dress trimmed with rich satin stitch embroidery on white linen or cambric, you can transfer it to your dark dresses. It is a style much affected by Parisians. Or if you will none of these things, you must do what all the world will be doing this winter, viz., trim with plush, and in this now favourite material you have a great choice. There is the striped plush, the pile of which stands up from a ground formed of silk stripes of a distinct colour, generally gold or black, which forms a good contrast to many hues—red, green, and blue; the ridged plush, with long pile and distinct ridges five inches wide; the watered plush, with the watering as plainly marked upon it as on silk or satin; and the mottled plush, of two colourings. Or if you discard plush, use fancy-striped velvet, the stripes of quite another colour from the ground, and the stripes mostly ombré.

I will proceed to describe the make of a few fashionable dresses. If you superintend your own wardrobe



or have much done at home, now will be the time when you will be getting your winter dresses made; and, of course, you will wish to know how to make them. Your skirts will all be short, or rather I should say, you cannot do wrong if you make them all short, even for balls and dinners. I have not yet seen a short wedding-dress, but other long skirts have passed out of fashion. Elderly people, and married people no longer young, have full dresses for morning and evening with trains, but that is all. The ordinary width of a skirt is 2½ yards; the fulness must be thrown to the back, and kept bouffant by stiff muslin gathered at the waist to half the length, and then that by one or two plaited flounces. For evening dresses you should certainly put two flounces, and edge each of them with narrow cane threaded through the plaits; the skirt then should just touch the ground. Bodices have the side seams, and not the six long seams from the neck; sleeves are tight, and are set high on the shoulder; there is often only one dart in front, and sometimes three. A new high art sleeve forms three puffs in the length of the arm, divided each by five very close-set gatherings only on the outside of the arm. You may use inlaid buttons or coloured bone buttons, and newer than any, those in exact imitation of old coins, bronze, silver, and copper, apparently battered and time-worn.

A fashionable skirt may be made with a deep puff of plush just gathered once, meeting the tunic which comes down on either side, and is gathered to it closely on the one side; this falls over a deep-gathered plush-edged flounce; the bodice has a basque and a turn-down collar. A pretty soft Vicuna cloth is made with single plaits from the waist, stitched down closely to near the edge, where it falls as a flounce; the tunic drapes over this, and the bodice is full and

belted. The tunic is cut in battlements and piped. A puffed front and train, and wide side pieces of distinct material, trimmed with heavy gimp ornaments, is a favourite style, and so are three gathered straight flounces, with a scarf-tunic above turned up so as to make pockets.

With all these dresses the stockings should be of plain colour to match and single-ribbed, or embroidered on the front with a contrasting colour. For evening, open-work is blended with the embroidery.

Evening gloves open out a field for the industrious. The backs are now beaded, and sometimes two puffings of kid are introduced on the arm, divided by a beaded strip. These cost from 10s. 6d. to £1, but I have just seen one arranged at home out of old materials, viz., a pair of double-buttoned black kids which had the welt removed, and to this was sewn the double puffings, made of two old pairs of many-buttoned kids; beads were added afterwards. Jet is used on black kid, pearls on white, beige beads on brown, steel on black or grey, and so on. The prettiest of evening dresses now are made in white and coloured Indian muslin, thin woollen stuffs, and black and white Spanish net and d'Alençon net, bordered with laces to correspond. Wide satin or moire ribbon is worn upon them, used as deep-looped bows, to which, for balls, very large flowers are added. In the country you may wear with safety sunflowers, holyhocks, chrysanthemums, and monster roses, natural blooms I mean. Nothing is more fashionable, and for those who have gardens more economical, but be careful not to choose what will fade. You cannot use too much lace on any evening dresses, and the favourite mode of applying it is as very fully gathered flounces of lace five inches broad.

For out-of-doors, fur capes and fur muffs will be worn, also feather muffs and tippets, and a quantity of dyed marabout is being applied to dresses and mantles. At present young ladies are wearing the white stylish cloth coat-jackets, which fall about half a yard below the waist, are double-breasted, and are made of the same smooth fine cloth that the coachmen's drab coats are made of; drab and brown are the favourite colours, and for people who do not mind being remarkable, crimson cloth; to the same people I would suggest red leather jackets, which English tailors are sending over to Paris, to some of our leaders of fashion, French and Spanish.

Small close bonnets are not superseded in England by the far more important, much-betrimmed Parisian ones, and in both countries sailor hats are worn trimmed with flowers; for winter they are covered with velvet and trimmed with feathers or with the new ribbons, which are most of them of a very remarkably bright mixture of colours and materials, and nearly all striped, viz., plush and satin stripes an inch at least wide, with velvet edges, or shot with plain satin reverse, or of the new velvet which has a shot





ground. Tartan ribbons, plush and satin, are applied in millinery. I have seen some of the large poke bonnets copied from the period when the Queen was the little Princess; they are trimmed with satin, and tied beneath the chin with a large bow of ribbon.

Lisse has quite gone out of date for the frilling at neck and throat, and vandyked net buttonholed at the edge has taken its place, or lace closely, very closely plaited, which can be washed over and over again. Some people are content with plaitings of cream Surah lined with a colour, but it is not so soft as the white net. Ultra-artistic people abjure anything of the kind.

The dresses to be found among our illustrations are designed principally for the popular winter materials—viz., broché velvet, plush (shot, striped, and watered), Rhadames, the new satin, or rather twilled silk, that is superseding Merveilleux, and woollens of all descriptions and nationalities. The fabrics used this winter for mantles are exceptionally rich, as a reference to the group attired for walking will show. The damsel who heads it, however, is not intended as an example of rich attire, as she wears a simple dark serge frock devoid of trimming, just what a school-gown should be. Her felt hat matches the dress in colour; it is lined with satin and has a plush torsade round its crown. But the mantle on No. 2 is rich in the extreme; broché velvet and satin with a quantity of the new gimp lace, some of which forms epaulettes, giving that high effect to the shoulders now considered *de rigueur*, are all used for this stately covering. It is lined with striped plush of diverse colours, another feature in the new mantles, black linings having passed away. In No. 3 we find bronze cloth, satin, and beaded lace used with great taste, while the bows are of watered silk ribbon. The skirt is of the same material, but the toque is of plush shot, and lined with satin of the new colour, copied at Lyons from the tint in the inside of a ripe melon. No. 4 sports a cloth costume, made up with Rhadames and trimmed with passementerie; the bodice is pointed and there is a suspicion of panier effect about the upper part of the skirt. No. 5 wears another of the superb winter mantles that find so much favour at present. This is made of satin matelassé and is trimmed with chenille fringe, each strand of which terminates with a jetted ball in size and form resembling a ripe mulberry. A large bow of wide watered ribbon ornaments the back. The bonnet has a drawn velvet crown and a shaggy plush border to its brim, the flowers are shaded plush, and the strings shot satin.



The group in evening demi-toilettes are all wearing "at home" gowns, which should be bright and tasteful, and here will be found useful suggestions for making up new materials as well as for furbishing up old ones, and also for combining two half-worn dresses into a single fashionable gown, an easy task now, as current modes lend peculiar facilities to the economically inclined. An example of such combination is the arrangement of the toilette worn by the seated figure in the second group under consideration. The bodice is broché satin, of light but brilliant colouring in which red is conspicuous; the sash below it is red satin, and the skirt is a pretty amalgamation of red satin and jetted Spanish lace. The dress worn by the second figure (who is young and blonde) is of broché gauze made up with lace of the same colour and watered silk ribbon likewise to match. The ribbon outlines a pointed waist, a detail very much affected at present. The third figure is a youthful matron in dark myrtle-green velvet and satin, with Venetian lace trimmings—a dress that requires no recommendation. The fourth toilette is plum satin and Paris embroidery, a pleasing combination, as the thick creamy lace-like trimming blends happily with the rich hue of the satin. The outlined figures—those attired in evening dresses—show rather more elaborate styles. The young lady holding a fan wears light silk gauze combined with satin, the shade called "green cream," a colour that is superseding yellow cream, and more like the foam of waves on a rocky coast than cream, but it received its eccentric name in Paris. No. 2 wears nun's veiling and satin of a delicate pale blue shade, the soft fabric lending itself gracefully to the various draperies and gatherings of the skirt; the trimming is lace.



In the two remaining outlined figures we have an out-door garment in which provision has been made for a crinolette. Dislike it as we may and rail against it as we do, in the strongest terms at command, crinoline has come in again, and is an undeniable fact, as yet only in the diminutive guise of crinolette. But dressmakers and tailors are providing for its extension; skirts are wider, and some new coats are bouffant at the back, as these outlined figures testify.

THE GATHERER.

An Improved Railway Car.

The relative merits of the English and American patterns of railway car have been discussed of late on both sides of the Atlantic, and it has been clearly brought out that while the American system gains in safety to the traveller from attack and robbery, it loses in point of privacy. A pair of first-class carriages, which appear to combine both of these advantages, are, however, now being tried on the London and North-Western Railway. They are connected together by a covered passage, and a gangway runs from end to end of both. Small compartments open out of this gangway on each side, and at the extremities of the two cars there are single compartments having four seats, which are available as couches for sleeping in at night. Two sleeping berths are also suspended from the roof for use if necessary. Each of these compartments occupies the whole breadth of the vehicle, and opens by a door into a room where an attendant is waiting. The side compartments opening on the gangway are also provided with sleeping accommodation, in the form of couches which fold against the wall when not in use.

Care has been taken to provide good ventilation, and facilities for viewing the scenery; lavatories are attached; and the cars are lit and heated by means of oil and coal-gas. In this way the freedom and convenience of the Pullman car is to a certain extent combined with the personal independence of the ordinary railway carriage.

A Surgical Machine.

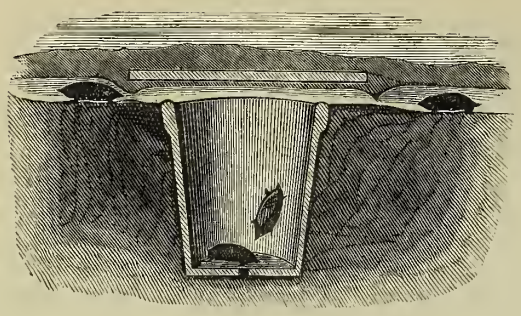
A machine for amputating bones has been invented by Dr. W. G. A. Bonwill, of Philadelphia, and presented by that gentleman to St. Bartholomew's Hospital. It consists of an iron standard carrying an arrangement of multiplying gear which, by means of an endless cord passing over pulleys, transmits rapid rotatory motion to either small drills or very fine circular saws, as the case may require. These tools are attached to the ends of a series of rods on universal joints, which permit the operator to move them in any direction he pleases while they are going at a very high speed. The machine is only employed for cutting bone, and by means of the drills the fractured pieces of a bone can be held in a particular position; while by means of the circular saws the shaft of the bone can be entirely severed in a few seconds, or pieces of any desired shape cut away. For simple amputations a fine straight saw is employed, and its holder is attached by an eccentric to the main gearing, so that a quick reciprocating motion is given to it by turning a hand-wheel. The slow movement of the surgeon's hand is thus transformed into a very rapid movement of the cutting tool, and the operation is more neatly and more swiftly performed than by the old manual method. The apparatus has not been tried in England yet, but it has already found favour among the surgeons of the United States.

An Electric Lamplighter.

The time-honoured flame enclosed in a brass box pierced with fine holes, which the lamplighter carries with him to light the street-lamps, is familiar enough; but a more scientific apparatus has been substituted for it in the shops of the Louvre at Paris. Instead of being capped by a flame the pole is fitted with a spiral of fine platinum wire, the ends of which are connected by flexible conductors to a galvanic battery. The circuit of the battery is interrupted by a small hand-key or press-button let into the handle of the pole just as the knob of an electric bell is let into the wall of a room. On pressing this button with his finger the lamplighter completes the circuit of the battery, and the current traversing the fine spiral of wire heats it red-hot and kindles the gas. Of course the advantage of this apparatus is that there is little danger of setting fire to anything with it, for the wire is only heated up whilst it is being applied to light the gas. It is, therefore, superior to a wick of cotton-wool steeped in spirits of wine, or a lamp, match, or taper; but, though valuable in this respect for shops and houses, it is not well adapted for street-lighting, owing to the necessity of transporting the battery with it.

A New Safety-Lamp.

It will be remembered that about a year ago M. Fleuss invented a diver's helmet which supplied its occupant with pure air for breathing purposes by chemical means. The same principle has recently been applied by M. Fleuss to the construction of a new safety-lamp for miners. The apparatus consists of a stand, oxygen-chamber, cover, and spirit-tank. The oxygen-chamber is spherical in shape and made of stout copper-plate. It is filled with oxygen pumped in at a pressure of 260 pounds on the square inch, and its outlet is a small pipe, furnished with an escape-valve and regulator, opening close to the wick of the lamp. Above this gas reservoir is a tank containing methylated spirits and fitted with a wick-holder and wick. Beside the wick is placed a thin iron rod, upon which is fastened a piece of lime. When the wick is lighted a stream of oxygen is turned on it from the little pipe by means of the regulator and valve, and the flame being blown on the block of lime produces a brilliant light. The whole is enclosed in a copper case fitted with a bull's-eye lens. The case is double-walled, and the intervening space is filled with water, through which the products of combustion have to pass on their way to the outer air, through an escape-valve on the top of the cover. The lamp is independent of the outer air, which is effectually excluded, and thus it is specially adapted for use below water or in fiery mines.

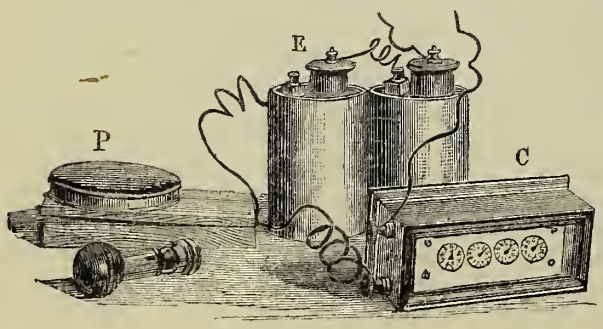


A Simple Mole-Trap.

Moles have their good as well as bad qualities. If, on the one hand, they cut up our lawns, on the other they destroy an enormous number of worms and grubs that would otherwise ruin young plants and crops. People to whom they are of service will allow them to remain unmolested, but those who like trim lawns will be anxious to get rid of the industrious miner, and to such the appliance represented in the woodcut will be useful. It is the simplest form of mole-trap, probably, in existence, and if skilfully employed cannot but prove effectual. A glass or earthenware jar of considerable depth is sunk into the ground under the runs. The moles, while scampering along their subterranean passages, in due time fall into the jar, out of which they are unable to extricate themselves in consequence of the slippery sides, which afford them no footing. The jars may be visited from time to time and the captive moles removed.

A Registering Stamp.

It is frequently advisable to record the number of letters sent out from a place of business, but hitherto it could not be done otherwise than by counting them. To supply this want Messrs. Ferguson and Kempe, of the Postal Telegraph Service, have taken advantage of the fact that letters are usually stamped on leaving an office, and have combined an electrical or mechanical registering apparatus with the hand-stamp. Either the pad for inking the stamp or the pad on which the letter is placed in order to be stamped is mounted on spring supports, and electric contacts are so arranged in conjunction with these springs that when the pad, P, in the figure receives the stamping pressure a current of electricity is transmitted from two voltaic cells, E, to a small counter, C, in which it moves the unit hand one division. When the stamp is operated by a lever, the contacts are arranged to be made by the play of the lever, and spring pads are not required. Where electricity cannot be conveniently employed the counter is combined with the hand-stamp itself, and operated mechanically. The stamp is fitted to move back a little in the handle against the forward pressure of a spring, and this movement, by the intervention of a pawl and ratchet wheel, actuates a small counter, likewise in the handle.



A Discovery in Shipbuilding.

Professor Raoul Pietet, the well-known Swiss physicist, announces a discovery in the art of naval architecture which, if feasible in practice, will greatly increase the speed of ships. It consists in a method of constructing the keel so as to diminish the resistance of the water to the lowest figure. Vessels built on the plan of the professor, instead of sinking their bows deeper in the water as the speed increases, will raise them further out so as to expose only their sides and bottom to the liquid friction. They will thus, as it were, glide over the water instead of pushing their way through it, and he anticipates that steamers built on this plan will attain a speed of forty miles an hour. A model steamer of the new design is now being built at Geneva, and when finished will ply upon the Lake Leman.

A Simple Balance.

A cheap balance for delicate weighings can be made as in the accompanying figure by fixing on a baseboard, B, an upright hollow standard, A, constructed of four strips of dry light wood fastened at the edges by screws. Into this tube a square rod, C, is caused to glide, and adjusted as regards height by the screw D. A strip of mirror-glass is held against the face, F, of the standard, A, by means of small brass bands. From the projecting pin, E, a fine spiral spring, *a*, is hung, and it carries at its lower end a scale-pan of nickel-plated brass 1½ inches in diameter. Just above the scale-pan is attached a bright white bead, *c*, which serves as an index in reading off the indications of the scale. To use the balance, the thing to be weighed is put into the pan, and the support, C, is raised until the latter hangs in front of the mirror. The eye is then made to range the white bead, *c*, with its reflection, *c'*, in the mirror behind, as shown in Fig. 2, and the sliding

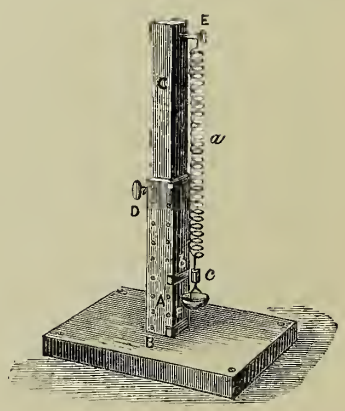


FIG. 1.

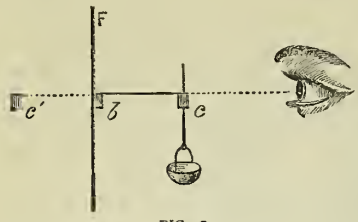


FIG. 2.

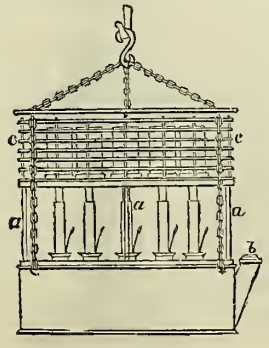
bar or index, *b*, is shifted along the mirror until its upper edge just touches the line of vision between the bead and its reflection. Keeping *b* in its place, the substance is then removed from its place, and weights substituted until the bead is brought back to its old position in a line with the slide, *b*. Of course the weights in the pan are equal to the weight of the substance.

A Steam Catamaran.

A new passenger boat in the shape of a steam catamaran has appeared in the waters of New York. A catamaran in the American sense is a boat with two hulls separated by a considerable distance ; but in its primitive form, as seen on the Brazilian coasts, it consists of two logs of light timber fitted with a mast, sail, and sleeping-berth. The new vessel is the invention of Mr. J. Eversten, of Troy, New York, and though its draught is very light, its carrying capacity is enormous. One 60 feet long and having a breadth of 6 feet for each hull is capable of taking 400 passengers. The propeller is hung between the two hulls, and on the platform connecting them are built two decks of the kind common on American river steamers. The upper deck is broad and open, and as it has only the pilot-house and captain's cabin to intercept the view, it is a favourite promenade with passengers.

A Fire-damp Consumer.

A novel apparatus for clearing mines of fire-damp and other inflammable gases by slowly burning them up has been invented by Herr Koerner, a German engineer, and tried successfully in a coal-pit near Langendreer, Westphalia, where nine cubic mètres of explosive gas issuing from a seam were harmlessly consumed by it in about seven minutes. It is based on the fact that the metals platinum and palladium, if heated red-hot, will effect the slow and gradual combination of carburetted hydrogen with the oxygen of the air. The apparatus consists of five palladium burners, shown in the figure between *c c*, and an oil reservoir, *b*, at the bottom of the consumer. This reservoir is filled with ligroïne or benzine oil, and asbestos wicks convey the oil through glass pipes, *a*, to the burners, where the wick is coated with palladium, and protected by wire gauze. The vapour of ligroïne keeps the palladium at a dull red heat, and the combustible gases are slowly oxidised at its glowing surface.



A Paralune.

A Parisian *modiste* has devised a dainty moonshade or "paralune" to keep the moonbeams from spoiling the complexion. Most people would consider the invention needless, but the originator holds that the moonrays have a detrimental effect on the skin. The paralune is a delicate shade of white silk lined with green or crimson, and it is stated to be in favour with those Parisian ladies who have ventured into the country.

For the use of the latter, too, a picturesque cork *sabot* has been introduced as a kind of goloshes, to enable them to walk on the damp woodland paths or visit farmyards with impunity. The paralune is probably a passing fancy ; but if it should ever come into regular use it is likely to be of chief service in the city streets and boulevards, where the electric light makes an artificial moonshine.

Boat-lowering Gear.

Mr. Carpenter's boat-detaching gear has the special advantage of employing no hooks, and being operated with great facility in a moment. As will be seen from Figs. 1 and 2, it consists in fixing the two lowering

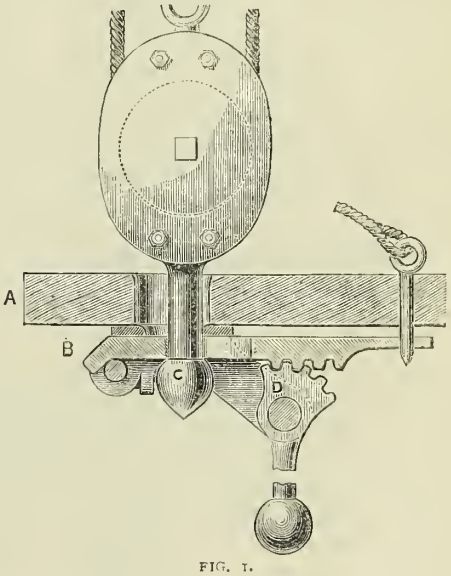


FIG. 1.

pulleys to the bow and stern of the boat by means of an ingenious sliding clamp. The action of this clamp will be understood from Fig. 2, where C is the lowering pulley, having a projecting knob on its under side ; A is a fixed plate rigidly attached to the keel of the boat ; and B is a sliding plate beneath it, which effects the clamping movement in the following manner. The sliding plate, B, is fitted with a rack which gears with a crank-lever, D, as shown ; and both the plates, A and B, have holes cut in them. Now, when the crank-lever, D, is horizontal the hole in the sliding plate, B, is in a line with the axis of the hole in A, and the projecting knob of the lowering pulley can pass through both plates, and therefore to release the boat from the

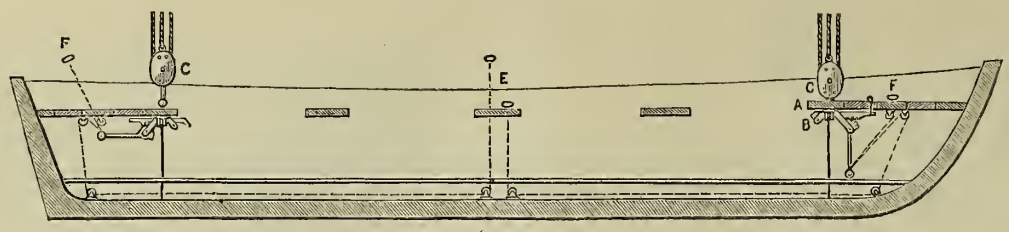


FIG. 2.

pulleys it is only necessary to pull the lever horizontal. On the other hand, when the lever is vertical, as shown in the figure, the hole in the sliding plate, B, is shifted to the right of the axis of the hole in A, and the projecting knob of the pulley is then jammed tight in the two holes. This is the position which corresponds to the suspension of the boat from the pulleys.

To facilitate the movements of the apparatus, lines run from the lever, D, along the bottom of the boat to one point, E, where a man by working these lines can engage both ends of the boat simultaneously. The short lines going to the points, F, at the stem and stern enable the men there when coupling on to raise the crank-lever without stooping under the thwarts.

Gas from Castor Oil.

At the gas-works of Jeypore, India, illuminating gas is now made from castor oil. First, the castor-seed is crushed to free it from the shells; then it is ground to a paste, which is heated in a pan, then packed into horsehair bags and pressed. The exuded oil is then manufactured into gas by destructive distillation, and 82 pounds, or one maund, of castor oil produces 750 cubic feet of 26½-candle gas, or 1,000 cubic feet of 18½-candle gas. The cost of the oil, including everything, is about £1 per maund. One peculiarity of the Jeypore system is the supply of gas in portable reservoirs to country customers, much in the same way as M. Faure proposes to retail stored-up electricity for electric lamps. The gas is compressed to three atmospheres of pressure in a wrought-iron holder, and delivered at the residence of the consumer, where the holder is connected to the pipes supplying the house.

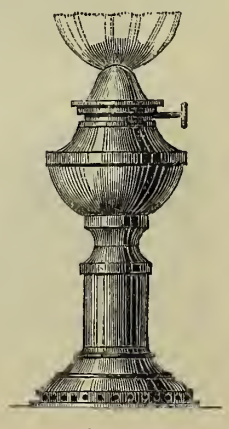
Caution about Toy Pistols.

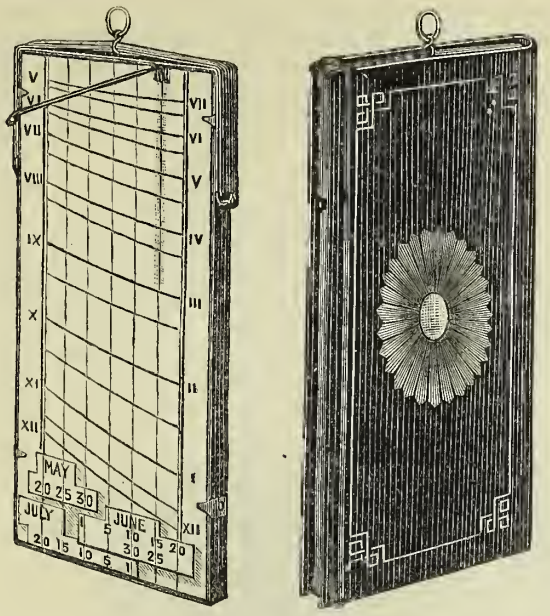
Some toy pistols may be regarded as harmless enough weapons, but considering the alarming number of accidents (some of which were fatal) to boys that followed the last celebration of the Fourth of July in the United States, a word of caution to parents will not be amiss. The pistol is made of cast-iron and has a barrel two inches long. It is a breech-loader and intended for blank cartridges, the powder being held in a metal case either by a paper wad or by folding in the end of the cartridge. The trigger is rudely made, and there is *always* a risk of accidental discharge when the hinged barrel is being returned to its place after the insertion of the cartridge. In that case an ugly wound is inflicted in the palm; other bruises result from fragments of the wad or of metal shot off with considerable violence. Mischievous boys have even put shot or missiles of various kinds in the barrels, and have incurred great danger to themselves and the public by so doing. In several instances lockjaw was the consequence of the wounds to the nerves of the hands. In fact the fatalities assumed such serious proportions, that the Philadelphia authorities this year altogether forbade the use of these toys on Independence Day.

As a good deal of this kind of amusement is in vogue amongst ourselves on Guy Fawkes Day, the Queen's Birthday, and other holidays, parents would do well to prohibit their children henceforth from employing this pistol. No doubt the inventiveness of youth will very speedily find another and, we trust, a safer outlet for the exuberance of their spirits.

A Chimneyless Lamp.

The chimney of an ordinary lamp is intended to create the draught of air necessary to feed the flame with oxygen, but chimney-glasses are troublesome and breakable, and Mr. Hoyne, an American, has obviated their use by employing a revolving fan to create the air current required. His lamp is illustrated herewith, and it yields a very white steady flame. The fan is placed in the pedestal of the lamp, where it is driven by clockwork, and draws air in through the holes round the foot of the stand. This air passes round the outside of the oil-vessel which is contained in the bulge of the lamp, and thus helps to cool the oil while on its way to the flame. The evaporation of oil and consequent smell is thereby kept down, and danger from explosion reduced. The clockwork runs for thirteen hours, and makes no appreciable sound. The naked flame is, of course, a brilliant object to the eyes; but to tone it down an opal screen is supported over it upon a light framework. For artists and microscopists in want of a bright light, the "Empress" lamp is likely to prove useful.





A Solar Watch.

Solar timepieces are of two kinds—those which mark the hour by the deflection of the shadow on the dial, and those which tell it by the length of the shadow. The latter plan has been adopted in the little French device illustrated herewith. It is the invention of M. Combette, and consists of a mahogany boardlet on which is placed a calendar-card for the three months of a season. Those represented on the figure are May, June, July. A needle with a hole bored at the end, as shown, is attached to the upper part of the card in order to project the shadow. To take an observation the card is held up to the light by the little ring on its top, and the needle is fixed at the top of the vertical line corresponding to the current day of the month. Thus the engraving shows the shadow cast along the line corresponding to the 15th and 25th of June. The dial is to be turned to right and left until the shadow exactly coincides with this line, when the luminous point projected by the eye of the needle indicates the hour, to the right for morning, and to the left for evening. On the 20th of June the sun is at his greatest height, and five days earlier or later, namely, on the 15th and 20th of that month, he is at the same height, so that the same line answers for both dates. The accompanying figure also shows the dial folded up for the pocket.

A Naphtha Locomotive.

The employment of naphtha as fuel for the locomotive has been successfully accomplished on the Tamboff to Saratoff railway in Russia, by M. Poretsky, the engineer. By its means steam was got up in less time than when burning wood or coal; the engine requires less cleaning than when the latter fuels are used, and less time is lost in taking in a fresh supply of the oil than in replenishing the tender with coal or wood.

An Electrical Balloon.

The dynamo-electric machine has proved itself so useful as an electric motor, and the "secondary battery" of M. Faure or of M. Planté is so convenient a reservoir of the electric power, that M. Tissandier, the eminent French aëronaut, has applied these apparatus to the propulsion of a balloon. His experimental arrangement is now being tried at the Paris Electrical Exhibition, and is illustrated in the following figures. The first gives a view of the propeller in all its details. The second shows the balloon itself with car, screw propeller, and guide-sail attached. The balloon is of an oval shape, about $3\frac{1}{2}$ mètres in length and $1\frac{1}{3}$ mètres in diameter. It has a capacity of 9 cubic mètres, and when filled with pure hydrogen gas, an ascending force of about 2 kilogrammes. The motive apparatus consists of a double-bladed screw propeller formed of a pliant cane bent in the form shown at A, Fig. 1, and filled in with stout cloth. This is rotated by the revolving armature of a small dynamo-electric motor, B, of the kind constructed by M. Trouvé. This little engine weighs only 220 grammes (about half a pound), and drives the screw at the rate of $6\frac{1}{2}$ turns per second. This propels the balloon through calm air at a speed of a mètre per second. The secondary battery of M. Planté, from which the electricity is derived that actuates the motor and makes its armature revolve, is shown at C. It is simply a glass vessel containing two lead plates rolled up together with a layer of flannel between, and immersed in water dashed with sulphuric acid. The electricity is stored in this arrangement from a voltaic battery or other generator, and is tapped for use when required. With two of these secondary cells the balloon is kept moving for forty minutes at the above-named velocity. It is to be regretted that M. Tissandier did not employ the new Faure accumulator or secondary battery in his experiments, for it has a greater storage power for electricity than the

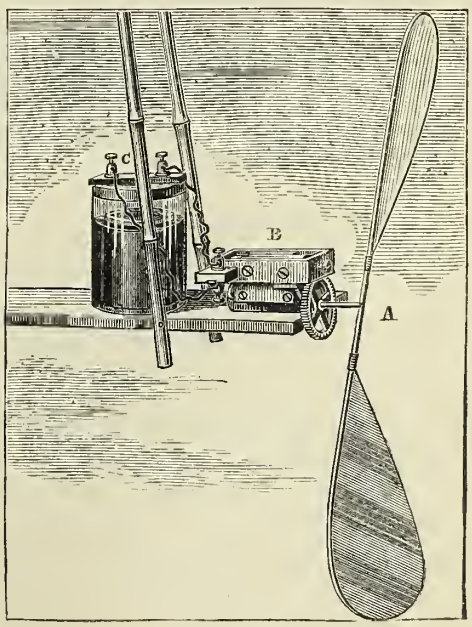


FIG. 1.

Planté model; but his results are sufficiently interesting. He estimates that a dynamo-electric machine giving 6 horse-power of work will weigh 300 kilogrammes, and require 9,000 kilogrammes of a Planté secondary battery to actuate it. An elongated balloon of 3,000 cubic mètres in volume filled with hydrogen will raise this weight of apparatus easily and allow a margin of 1,000 kilogrammes, or nearly a ton, for passengers and baggage. In calm weather such a conveyance could travel at the rate of from 20 to 25 kilomètres (12 to 15 miles) per hour. This rate could, of course, only be kept up for a limited time—quite sufficient, however, to carry passengers across the Channel. In rough weather the arrangement would not be very practicable, owing to the drifting force of adverse winds. However, if balloons are to be propelled mechanically at all—and in this direction the true solution of aërial travel lies—it will doubtless be by means of stored electricity, which is both safe against fire and easy to manipulate.

A New Machine.

An invention which we hope will speedily find its way to England has just come into use upon the Pennsylvania Railroad. This machine is an automatic "track tester" which finds out all faults in the gauge of the rails, that may not be apparent to the inspectors' eyes, makes a record of them and indicates their locality. This wonderful work is accomplished with great rapidity, for the track tester passes over the rails at a speed of 20 miles an hour. In appearance it is like a baggage-car, but is fitted with electric clocks and the self-registering apparatus. The faults in the rail jolt the delicate car, thus causing themselves to be noted. Errors in levels in the rails are recorded by pencils on ruled paper, working down to a fault of an eighth of an inch, and an apparatus shows the errors in the gauge. A distance and time register shows the places where faults have been noted. Were such a machine constantly employed no accidents from the giving way of "chairs" or bolts or from neglected rails could occur.

Hearing Plants Grow.

At a meeting of the Silesian Botanical Society a few weeks ago, an apparatus was exhibited which enabled the spectators to *hear* plants growing. The plants were connected with a disc which possesses an indicator in the centre. This indicator works with regularity and, upon a highly magnified scale, registers the growth of the plant with which the disc is thus connected. The metal disc and indicator when brought into contact with an electric hammer interrupt the electric current at each of the dividing interstices of the disc and produce a sound the result of the action of growing plants, which thus becomes audible.

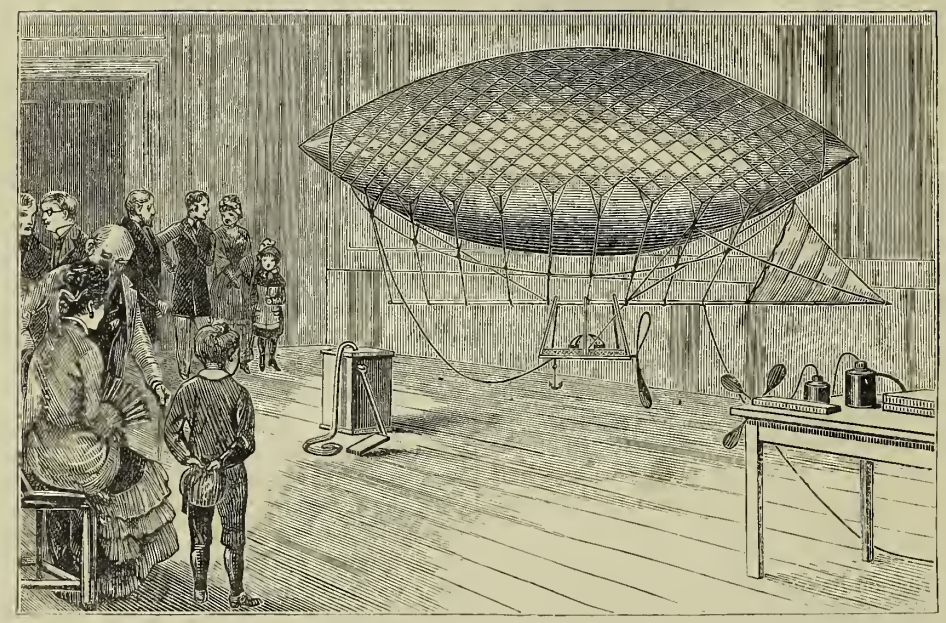


FIG. 2.

Chess Problem Competition.

PRIZE AWARD.

The Editor begs to announce that the Prize of Five Pounds offered in this Competition will be DIVIDED *between*

W. C. SELL, 14, Banbury Road, South Hackney; *and*
J. W. PARSONS, 40, Charrington Street, Oakley Square, N.W.;

whose Problems are, all things considered, of equal merit. No other competitor has proved himself worthy of special commendation.

Music Competition.—Our readers are reminded that MSS. for this Competition cannot be received later than November 1st, 1881.

CASSELL'S MAGAZINE

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